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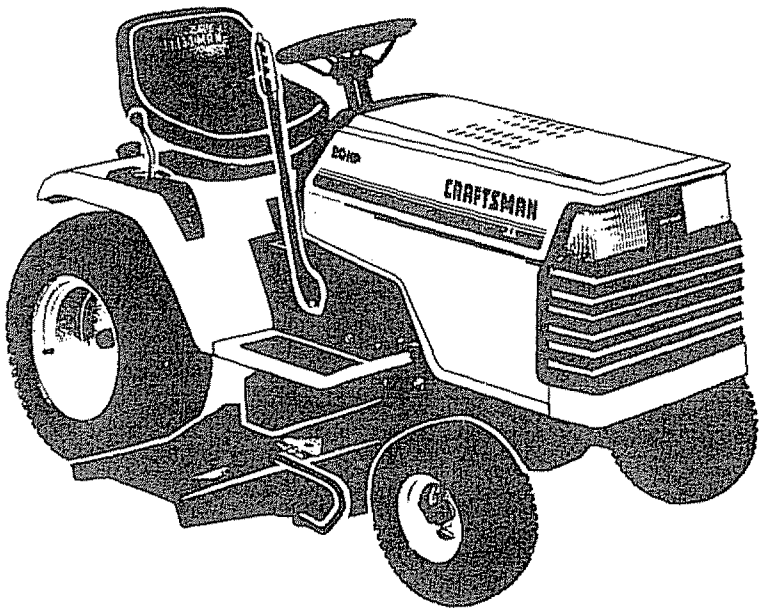
SEARS

OWNER'S MANUAL

MODEL NO.
917.254460

MODEL NO.
917.250040
(without
Mower Deck)

Caution:
Read and follow all Safety Rules and Instructions Before Operating This Equipment




# CRAFTSMAN®
# 20.0 HP TWIN ELECTRIC START 44" MOWER DECK 6 SPEED TRANSAXLE GARDEN TRACTOR

- Assembly
- Operation
- Maintenance
- Service and Adjustment
- Repair Parts

Sears, Roebuck and Co., Chicago, IL 60684 U.S.A.

**LOOK FOR THIS SYMBOL TO POINT OUT IMPORTANT SAFETY PRECAUTIONS. IT MEANS - ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED.**

CAUTION: LOOK FOR THIS WORD TO POINT OUT IMPORTANT EQUIPMENT PRECAUTIONS.

NOTE: LOOK FOR THIS WORD TO POINT OUT IMPORTANT INFORMATION ABOUT THE OPERATION AND PERFORMANCE OF YOUR TRACTOR.

# RULES FOR SAFE OPERATION

**WARNING:** This unit is equipped with an internal combustion engine and should not be used on or near any unimproved forest covered, brush covered or grass covered land unless the engine's exhaust system is equipped with a spark arrester meeting applicable local or area laws (if any). If a spark arrester is used, it should be maintained in effective working order by the operator. (See REPAIR PARTS for part number identification).

In the State of California the above is required by law (Section 4442 of the California Public Resources Code). Other States may have similar laws. Federal laws apply on federal lands.

1. Know the controls and how to stop quickly. READ THIS OWNER'S MANUAL and instructions furnished with attachments.
2. Do not allow children to operate the machine. Do not allow adults to operate it without proper instruction.
3. Do not carry passengers. Do not mow when children and others are around.
4. Always wear substantial footwear. Do not wear loose fitting clothing that could get caught in moving parts.
5. Keep your eyes and mind on your tractor, mower, and the area being cut. Do not let other interests distract you.
6. Do not attempt to operate your tractor or mower when not in the driver's seat.
7. Always get on or off your tractor from the operator's left hand side.
8. Clear the work area of objects (wire, rocks, etc.) which might be picked up and thrown.
9. Disengage all attachment clutches before attempting to start the engine.
10. Disengage power to attachments and stop the engine before leaving the operator's position.
11. Disengage power to mower, stop the engine, and disconnect spark plug wire(s) from spark plug(s) before cleaning, making an adjustment, or repair. Be careful to avoid touching hot muffler or engine components.
12. Disengage power to attachments when transporting or not in use.
13. Take all possible precautions when leaving the vehicle unattended. Disengage the power take-off, lower the attachments, shift into neutral, set the parking brake, stop the engine, and remove the key.
14. Do not stop or start suddenly when going uphill or downhill. Mow up and down the face of slopes (not greater than 15°), never across the face. Refer to page 55.
15. Reduce speed on slopes and make turns gradually to prevent tipping or loss of control. Exercise extreme caution when changing direction on slopes.
16. While going up or down slopes, place gear shift control lever in 1st gear position to negotiate the slope without stopping.
17. Never mow in wet or slippery grass, when traction is unsure, or at a speed which could cause a skid.
18. Stay alert for holes in the terrain and other hidden hazards. Keep away from drop-offs.
19. Do not drive too close to creeks, ditches, and public highways.
20. Exercise special care when mowing around fixed objects in order to prevent the blades from striking them. Never deliberately run tractor or mower into or over any foreign objects.
21. Never shift gears until tractor comes to a stop.
22. Never place hands or feet under the mower, in discharge chute, or near any moving parts while tractor or mower is running. Always keep clear of discharge chute.
23. Use care when pulling loads or using heavy equipment.
    a. Use only approved drawbar hitch points.
    b. Limit loads to those you can safely control.
    c. Do not turn sharply. Use care when backing.
    d. Use counterweight or wheel weights when suggested in owner's manual.
24. Watch out for traffic when crossing or near roadways.
25. When using any attachments, never direct discharge of material toward bystanders nor allow anyone near the vehicle while in operation.
26. Handle gasoline with care - it is highly flammable.
    a. Use approved gasoline containers.
    b. Never remove the fuel cap of the fuel tank or add gasoline to a running or hot engine or an engine that has not been allowed to cool for several minutes after running. Never fill tank indoors. Always clean up spilled gasoline.
    c. Open doors if the engine is run in the garage - exhaust fumes are dangerous. Do not run the engine indoors.
27. Keep the vehicle and attachments in good operating condition, and keep safety devices in place and working.
28. Keep all nuts, bolts, and screws tight to be sure the equipment is in safe working condition.
29. Never store the equipment with gasoline in the tank inside a building where fumes may reach an open flame or spark. Allow the engine to cool before storing in any enclosure.
30. To reduce fire hazard, keep the engine free of grass, leaves, or excessive grease. Do not clean product while engine is running.
31. Except for adjustments, DO NOT operate engine if air cleaner or cover directly over carburetor air intake is removed. Removal of such part could create a fire hazard.
32. Do not operate without a muffler, or tamper with exhaust system. Damaged mufflers or spark arresters could create a fire hazard. Inspect periodically and replace if necessary.
33. The vehicle and attachments should be stopped and inspected for damage after striking a foreign object, and the damage should be repaired before restarting and operating the equipment.
34. Do not change the engine governor settings or overspeed the engine; severe damage or injury may result.
35. When using the vehicle with mower, proceed as follows:
    a. Mow only in daylight or in good artificial light.
    b. Shut the engine off when unclogging chute.
    c. Check the blade mounting bolts for proper tightness at frequent intervals.
36. Do not operate the mower without the entire grass catcher, on mowers so equipped, or the deflector shield in place.
37. Disengage power to mower before backing up. Do not mow in reverse unless absolutely necessary and then only after careful observation of the entire area behind the mower.
38. Under normal usage the grass catcher bag material is subject to deterioration and wear. It should be checked frequently for bag replacement. Replacement bags should be checked to ensure compliance with the original manufacturer's recommendations or specifications.

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***CONGRATULATIONS*** *on your purchase of a Sears Garden Tractor. It has been designed, engineered and manufactured to give you the best possible dependability and performance. Should you experience any problem you cannot easily remedy, please contact your nearest Sears Service Department. We have competent, well-trained technicians and the proper tools to service or repair this unit.*

***MAINTENANCE AGREEMENT***

*A Sears Maintenance Agreement is available on this product. See the nearest Sears store or service center for details.*

**SERIAL NUMBER** _____

**DATE OF PURCHASE** _____

**THE SERIAL NUMBER WILL BE FOUND ON THE MODEL PLATE UNDER THE SEAT.**

**YOU SHOULD RECORD THESE NUMBERS AND KEEP FOR FUTURE REFERENCE.**

***CUSTOMER RESPONSIBILITIES***

*Read and retain this manual. Study and observe the safety rules. Always use care when using your tractor. Always keep your tractor and mower clean. Follow a regular schedule in maintaining, caring for, and using your tractor. A well cared for tractor will run better and last longer.*

***ATTACHMENTS***

*This unit can use many attachments now available at your Sears store. See pages 53-54 for a list of available attachments.*

## LIMITED TWO YEAR WARRANTY
## ON ELECTRIC START RIDING EQUIPMENT

For two years from date of purchase, when this riding equipment is maintained, lubricated, and tuned up according to the operating and maintenance instruction in the owner's manual, Sears will repair free of charge any defect in material or workmanship in this electric start riding equipment.

This warranty excludes blade(s), blade adapter(s), spark plug(s), air cleaner and belt(s), which are expendable and become worn during normal use.

This warranty does not cover:

- Tire replacement or repair caused by punctures from outside objects (such as nails, thorns, stumps, or glass); and
- repairs necessary because of operator abuse or negligence, including the failure to maintain the equipment according to instructions contained in the owner's manual; and
- riding equipment used for commercial or rental purposes.

**FULL 90 DAY WARRANTY ON BATTERY**

For 90 days from the date of purchase, if any battery included with this riding equipment proves defective in material or workmanship and our testing determines the battery will not hold a charge, Sears will replace the battery at no charge.

WARRANTY SERVICE IS AVAILABLE BY CONTACTING THE NEAREST SEARS SERVICE CENTER DEPARTMENT IN THE UNITED STATES. This warranty applies only while this product is in use in the United States.

This warranty gives you specific legal rights, and you may also have other rights which may vary from state to state.

SEARS, ROEBUCK and CO., D/731CR-W, Sears Tower, Chicago, IL 60684

**DO NOT OVERLOAD TRACTOR BY TOWING WEIGHTS GREATER THAN 150 POUNDS (68 kg).**

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# ASSEMBLY

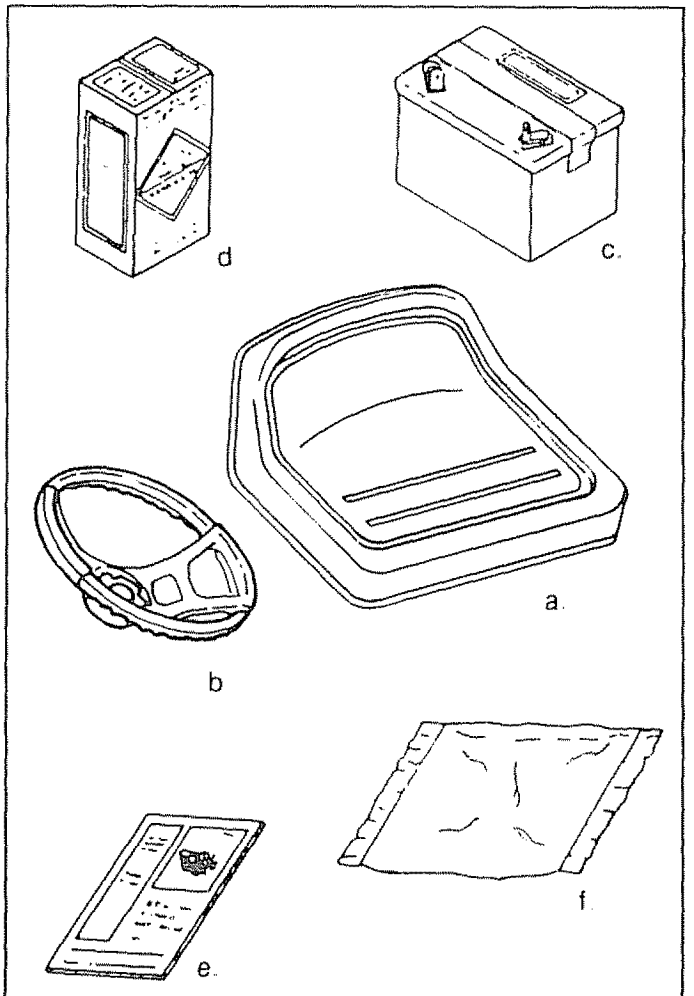
*To assemble and adjust your tractor you will need:*

| | |
|---|---|
| *(2) 7/16" Wrenches* | *Ratchet wrench* |
| *(1) 3/4"" Wrench* | *Tire Pressure Gauge* |
| *(1) 9/16" Wrench* | *Screwdriver* |
| *(1) 1/2" Wrench* | *Utility Knife* |
| *(1) 3/4" Socket* | *(2) 11/16 wrench* |

NOTE: RIGHT HAND (R.H.) AND LEFT HAND (L.H.) ARE DETERMINED FROM OPERATOR'S POSITION WHILE SEATED ON THE TRACTOR.

## UNPACKING INSTRUCTIONS

1. Remove box from carton. The box contains the items shown below.
2. Cut down four corners of the carton with a utility knife and fold down sides.
3. Remove mower deck from skid.
4. Disengage Parking Brake
5. Carefully guide the tractor backwards off the skid




| | |
|---|---|
| a. Seat | d. Battery Acid |
| b. Steering Wheel | e. Owner's Manual |
| c. Battery | f. Parts Bag |

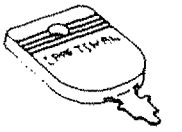
The operation of any tractor can result in foreign objects thrown into the eyes, which can result in severe eye damage. Always wear safety glasses or eye shields before starting your tractor and while mowing. We recommend Wide Vision Safety Mask for over the spectacles or standard safety glasses, available at Sears Retail or Catalog Stores.

Parts Bag Contents Not Shown Full Size

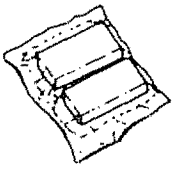
(2) Battery Carriage Bolts - 1/4 - 20 x 7 1/2

Terminal Guard

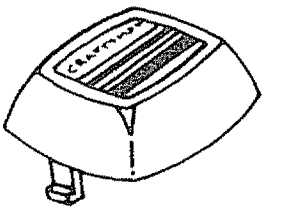
15° Slope Instruction Sheet



(2) Keys



(6) Battery Caps



Steering Wheel Insert

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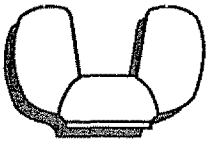
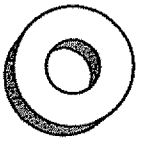
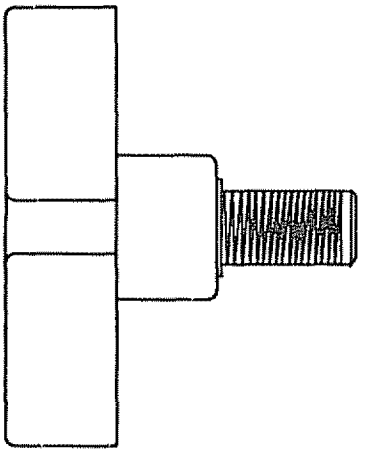
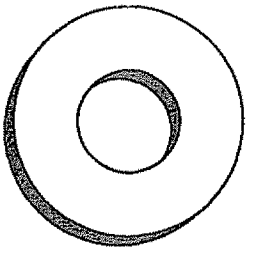
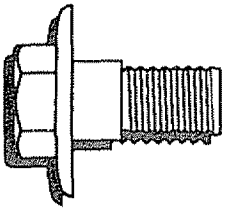
# ASSEMBLY

| ASSEMBLY LOCATION | PARTS BAG CONTENTS SHOWN FULL SIZE |
|---|---|
| BATTERY |  (2) Wing Nut, 1/4 - 20 |
| BATTERY TERMINALS | (2) Hex Bolt, 1/4 - 20 x 3/4 (2) Lockwasher, 1/4  (2) Washer, 9/32 x 5/8 x 16 Ga (2) Hex Nut, 1/4 - 20 |
| SEAT |  (1) Adjustment Knob 1/2  (1) Washer 17/32 x 1 3/16 x 12 Ga  (1) Shoulder Bolt 5/16 - 18 |

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**WEAR EYE AND FACE SHIELD.**
**WASH HANDS OR CLOTHING IMMEDIATELY IF ACCIDENTALLY IN CONTACT WITH BATTERY ACID.**
**DO NOT SMOKE, FUMES FROM CHARGED BATTERY ACID ARE EXPLOSIVE.**

NOTE: THIS TRACTOR IS EQUIPPED WITH AN OPERATOR PRESENCE SENSING SWITCH. ANY ATTEMPT BY THE OPERATOR TO LEAVE THE SEAT WITH THE ENGINE RUNNING AND ATTACHMENT CLUTCH ENGAGED WILL SHUT OFF THE ENGINE.

***1. Prepare Battery***

READ INSTRUCTIONS INCLUDED WITH THE BATTERY. VENT CAPS FOUND IN BAG OF PARTS. ALWAYS WEAR GLOVES, CLOTHING AND GOGGLES TO PROTECT YOUR HANDS, SKIN AND EYES.

a. *Fill and charge battery (before installing).* NOTE: SEE DETAILED INSTRUCTIONS PACKAGED WITH BATTERY VENT CAPS IN BAG OF PARTS.

NOTE: OVERCHARGING WILL SHORTEN BATTERY LIFE.

b. *Fill battery with battery acid to bottoms of tubes in cells (Fig 1).* DO NOT OVERFILL. OVERFILLING WILL RESULT IN DAMAGE TO TRACTOR.

c. *Check level of battery acid after 30 minutes. Add additional battery acid if necessary.* NOTE: PRESS VENT CAPS INTO BATTERY UNTIL FASTENED SECURELY.

NOTE: OBSERVE SAFETY PRECAUTIONS, LISTED IN BOX ABOVE, REQUIRED FOR BATTERY CHARGING.

d. *Charge battery at a rate of six amperes for one hour.*

e. *Neutralize excess battery acid (from filling battery) for disposal by adding it to 7.4 litres (2 gallons) of water in a 19 litres (5 gallon) plastic container. Stir with a wooden or plastic paddle while adding baking soda until the addition of more soda causes no more foaming.*

***2. Install Seat***

*Seat position should be adjusted forward or backward so that the operator can comfortably reach Clutch/Brake Pedal and safely operate the tractor (Fig. 14).*

a. *Remove cardboard from seat pan.*

b. *Place seat on seat pan. Screw adjustment knob and flat washer into seat (Fig. 2) Screw shoulder bolt into seat (Fig. 2). Adjustment knob, shoulder bolt and washer found in bag of parts.*

CUT AWAY VIEW

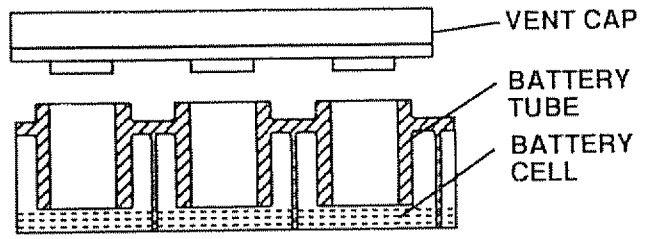



*FIGURE 1*

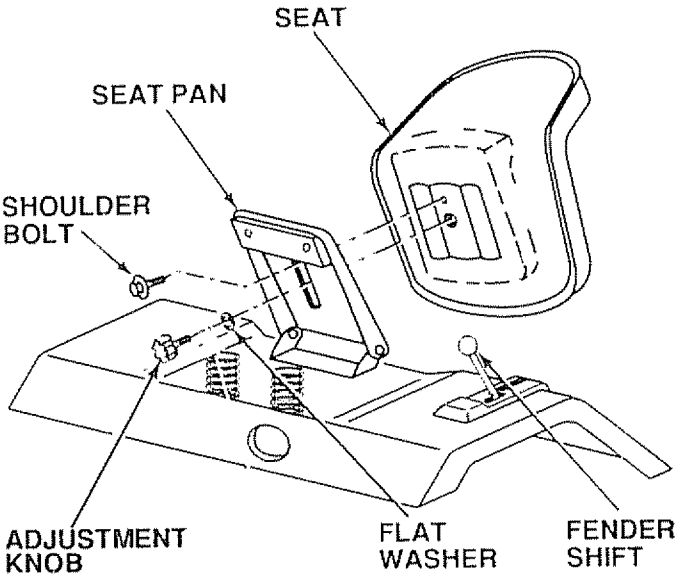



*FIGURE 2*

**THE ADJUSTMENT BOLT AND FLAT WASHER MUST BE TIGHTENED SECURELY TO PREVENT MOVEMENT OF SEAT.**

c. *Tighten shoulder bolt using a 1/2" wrench. NOTE: THE SHOULDER BOLT WILL BE LOOSE IN THE SEAT PAN SLOT.*

d. *Tighten adjustment knob finger tight.*

e. *Place seat in operating position. Sit on the seat and press clutch/brake pedal all the way down. If operating position is not comfortable, adjust seat.*

f. *To adjust: raise seat. Loosen adjustment knob. Slide seat to desired position. Tighten adjustment knob securely.*

# ASSEMBLY

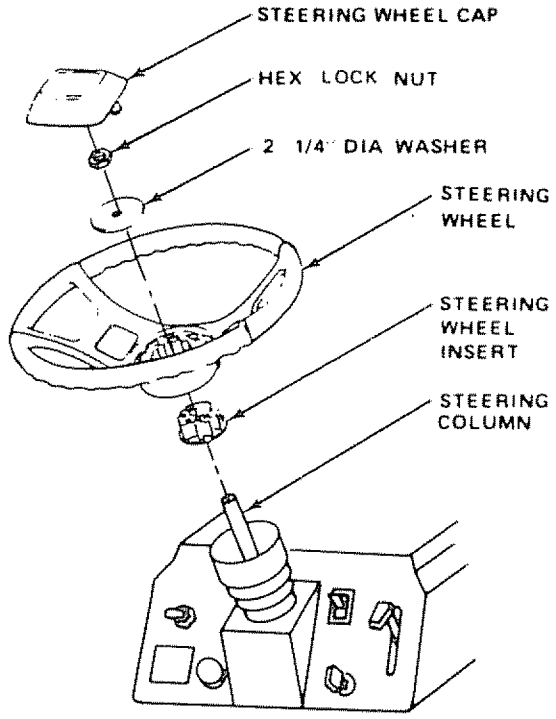



FIGURE 3

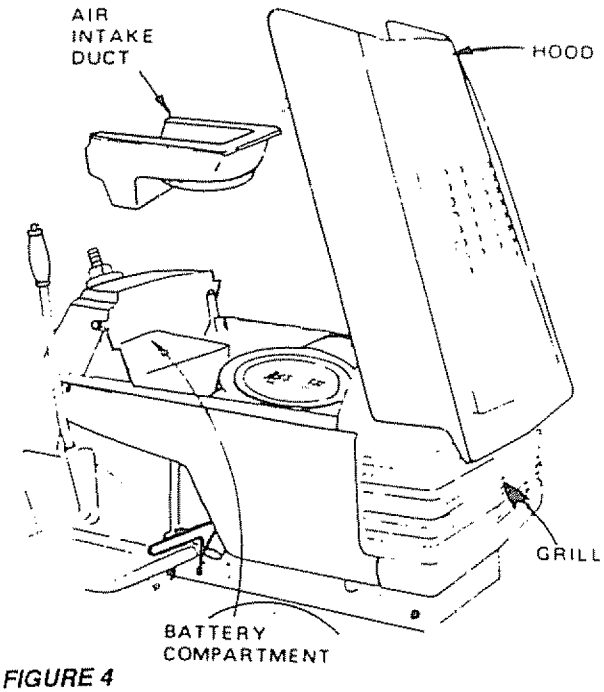
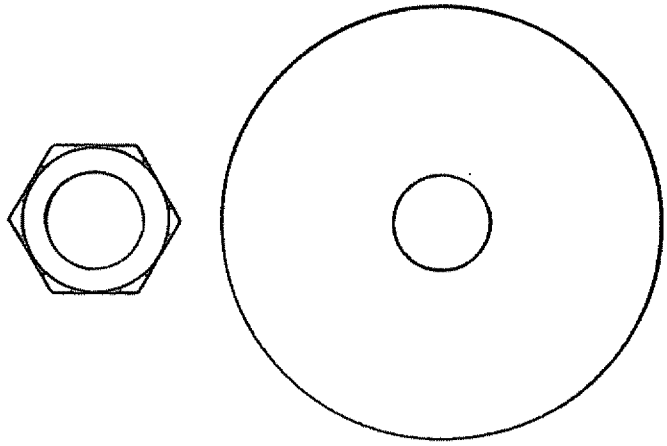



FIGURE 4

### 3. Install Steering Wheel

*NOTE POSITION FRONT WHEEL FORWARD.*

a *Use a 3/4" wrench to remove lock nut, and 2 - 1/4" diameter washer (shown full size below) from steering column (Fig 3)*



b. *Position steering wheel over steering wheel insert (Fig. 3).* BARS OF STEERING WHEEL SHOULD POINT STRAIGHT ACROSS TRACTOR.

c *Secure steering wheel to steering column using 2 1/4 diameter washer and lock nut (Fig 3) Torque to 68 N-m (50 Ft. Lbs.)*

d *Snap steering wheel cap in place on steering wheel Steering wheel cap found in bag of parts*

### 4. Check Tires

*Reduce tire pressure to 1 Kg/cm² (14 PSI) in front tires and 0.71 Kg/cm² (10 PSI) in rear tires. (Tires were overinflated for shipping purposes.)*

5 *Install Battery*

DO NOT SHORT BATTERY TERMINALS

BEFORE INSTALLING BATTERY, REMOVE METAL BRACLETS, WRISTWATCH BANDS, RINGS, ETC.

**IF BATTERY IS REMOVED, DO NOT OPERATE ENGINE. SPARKING MAY OCCUR.**

a *Lift hood from rear sides (Fig 4)*

b *Make sure drain tube (Fig 5) is fastened to drain hole in battery tray and battery tray is positioned in hole of battery support.*

c *Place battery in plastic tray (battery terminals to front of tractor) (Fig 5)*

POSITIVE TERMINAL MUST BE CONNECTED FIRST TO PREVENT SPARKS FROM ACCIDENTAL GROUNDING.



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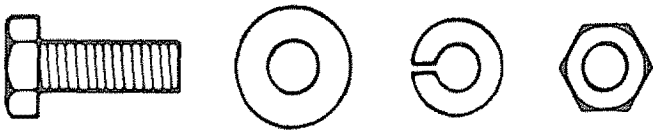
*e. Connect RED battery cable to positive (+) battery terminal with hex bolt, flat washer, lockwasher and hex nut (shown full size below) found in bag of parts (Fig. 5). Tighten securely.*

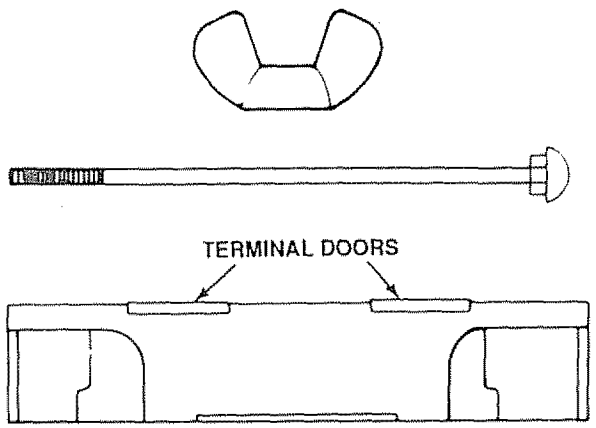
*f. Connect BLACK ground cable to negative (-) battery terminal with remaining hex bolt, flat washer, lockwasher and hex nut (shown full size below) found in bag of parts (Fig. 5). Tighten securely.*



NOTE: IF YOU HAVE A WEAK BATTERY, SEE "STARTING YOUR TRACTOR WITH A WEAK BATTERY" (PAGE 20)

*g. Using the square hole on one side of the battery support (Fig. 6) insert one battery bolt, head of bolt down. Fasten the battery bolt to the terminal guard using wing nut as shown (Fig. 6). Bolts, nuts, and terminal guard, shown below, are found in bag of parts.*

*h. Assemble the remaining battery bolt to other side of battery support and fasten terminal guard to it with remaining wing nut. Tighten both wing nuts securely (by hand)) at the same time (Fig. 6).*




*i. Replace air intake duct (Fig. 4). Make sure bottom lip of duct sits between battery and lip of battery tray.*

*j. Remove plastic from tractor hood and close.*

NOTE: USE TERMINAL ACCESS DOORS (FIG. 6) FOR:
1. INSPECTION FOR SECURE CONNECTIONS (TIGHTEN HARDWARE)
2. INSPECTION FOR CORROSION
3. TESTING BATTERY
4. JUMPING (IF REQUIRED)
5. CHARGING (IF REQUIRED)

**KEEP TERMINAL ACCESS DOORS CLOSED WHEN NOT IN USE.**

**DO NOT START ENGINE UNTIL MOWER SUSPENSION BRACKET HAS BEEN RELEASED. SEE MOWER AND DRIVE BELT INSTALLATION, PAGE 10.**

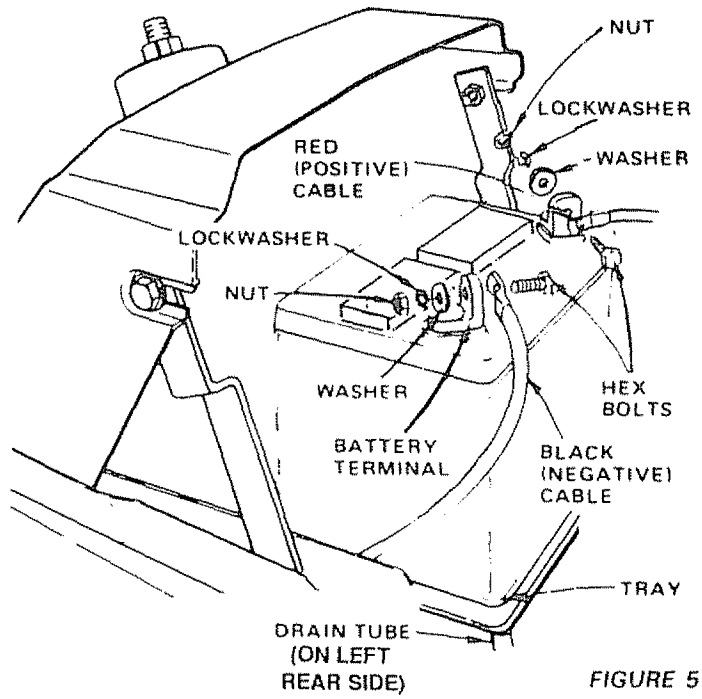



*FIGURE 5*

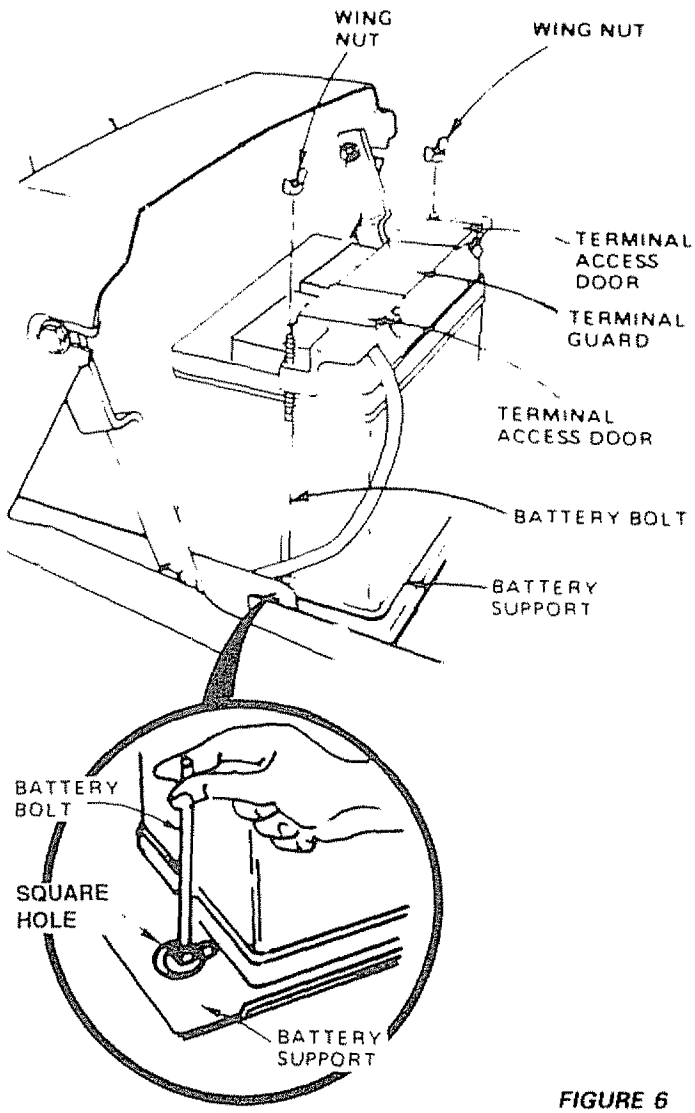



*FIGURE 6*

# ASSEMBLY

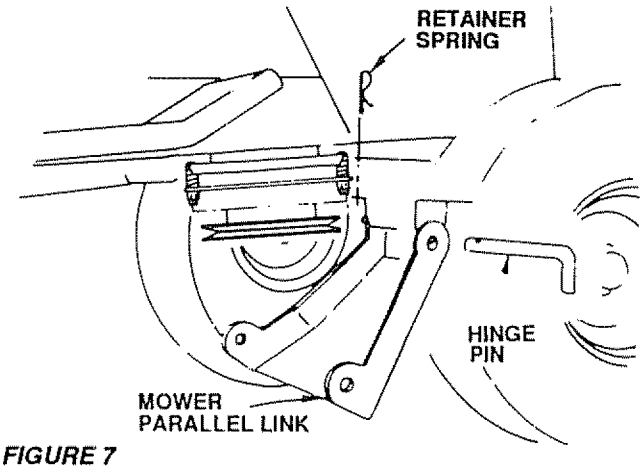



*FIGURE 7*

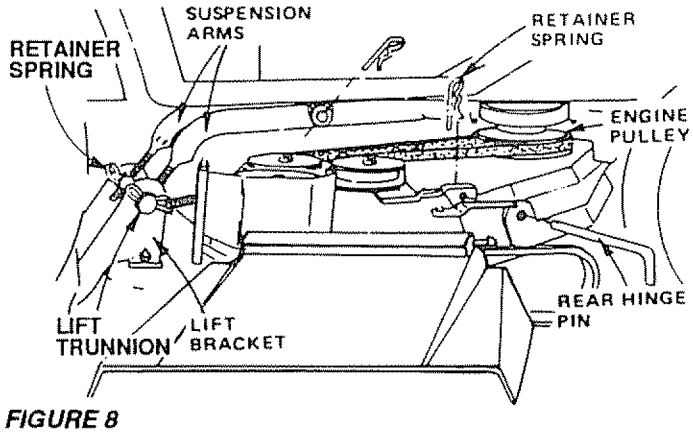



*FIGURE 8*

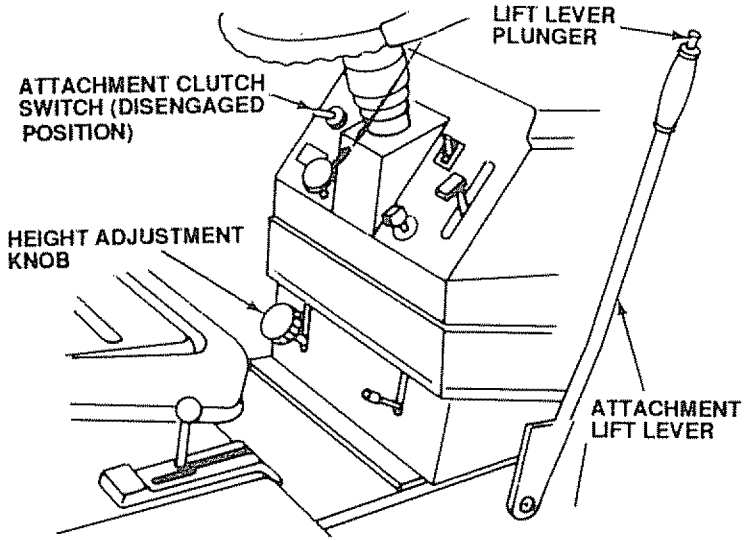



*FIGURE 9*

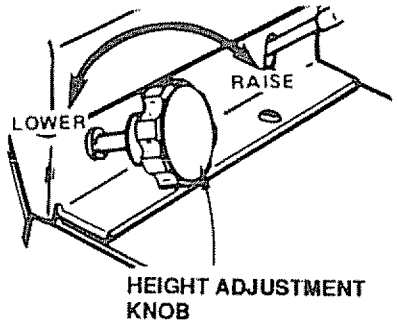



*FIGURE 10*

### 6. Mower and Drive Belt Installation

#### INSTALL MOWER PARALLEL LINK

*Your tractor has been shipped with the mower parallel link included in the parts carton. Install mower parallel link on tractor (Fig. 7) using hinge pin and retainer spring.*

NOTE: SMALLER END OF PARALLEL LINK MOUNTS TO TRACTOR. USE THE SHORTEST HINGE PIN FOR MOUNTING.

#### INSTALL MOWER

*Your mower installs without the use of tools.*

*a. Raise attachement lift lever (Fig. 9) to its highest position.*

*b. Turn height adjustment knob counterclockwise ( ) to lowest position (Fig. 10)*

*c. Slide mower under tractor with discharge guard to R.H. side.*

*d. Install rear hinge pin through mower lift brackets and parallel link (Fig. 8). Secure with retainer spring.*

*e. Move attachment lift lever (Fig. 9) forward to lower suspension arms. Remove retainer springs from lift trunnions (Fig. 8).*

*f. Slide trunnions through upper lift bracket holes and secure with retainer springs (Fig. 8).*

*g. Pull L.H. idler pulley (Fig. 12) toward the right hand side of the tractor and roll belt over engine pulley (Fig. 8).*

NOTE: MOWER DRIVE BELT INSTALLATION DECAL LOCATED ON MOWER HOUSING.

*h. Use attachment lift lever (Fig 9) to raise mower.*

*i. Turn height adjustment knob clockwise ( ) to the middle of its travel (Fig. 10).*

### 7. Check Cutting Level

*The blade housing was set at the factory to cut level. After mowing a short distance, look at the area that was cut. If the blade housing cuts uneven, see "MOWER ADJUSTMENT," page 21*

### 8. Final Assembly

*a. Make sure all fasteners are tight.*

*b. Read and follow the operation instructions (page 11). Know the location and purpose of all controls.*

*c. Check oil and gasoline (page 12) before starting the tractor.*

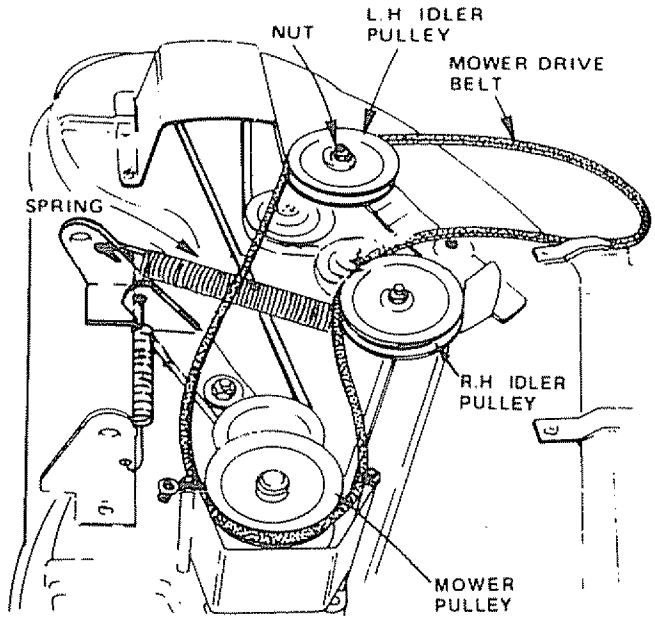



*FIGURE 11*



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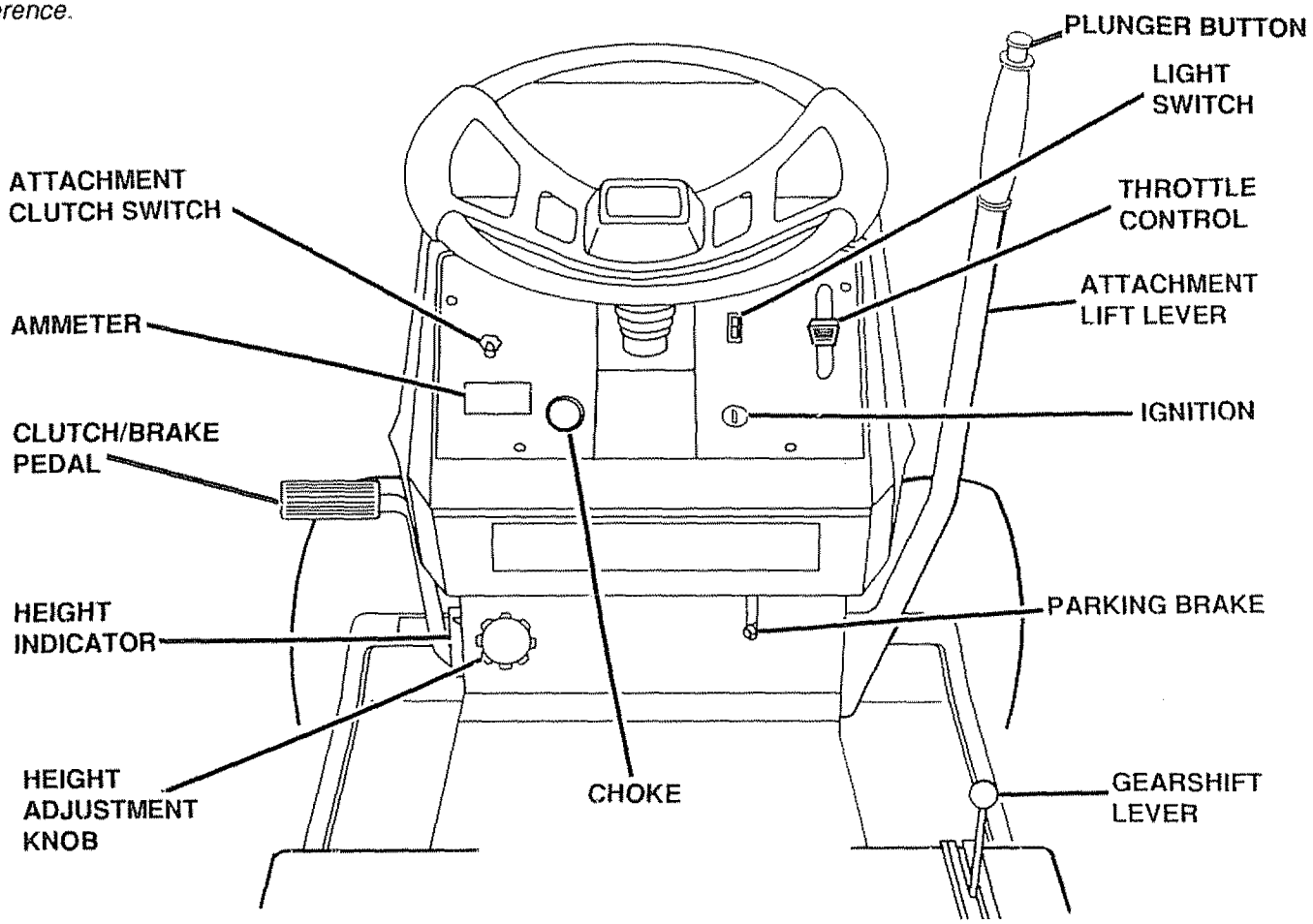
***READ THIS OWNER'S MANUAL BEFORE OPERATING YOUR GARDEN TRACTOR.*** *If you understand the unit and its operation, you will achieve efficient and peak performance. While reading the manual, compare the illustrations with your Garden Tractor to familiarize yourself with the location of the various controls and adjustments. Study the operating instructions and safety precautions thoroughly to insure proper functioning of your Garden Tractor and to prevent injury to yourself and others. Be sure to pay strict attention to all warnings and cautions; they are included for your safety. Save this manual for future reference.*




***AMMETER:*** *Each time you start your tractor, check your ammeter. The needle should move toward the (+) charging mark indicating the battery is being charged as you operate your tractor. The headlights will not show a discharge on the ammeter because they are not connected to the battery. (They have their own electrical source.)*

***ATTACHMENT CLUTCH SWITCH:*** *Pull switch out and up to engage attachment. There will be an engine hesitation as the clutch engages.*

***ATTACHMENT LIFT LEVER:*** *Use the attachment lift lever to raise and lower the attachment mounted to your tractor. Move the lift lever forward to lower attachment.*

***CLUTCH/BRAKE PEDAL:*** *The pedal has 2 functions; a clutch and a brake. To engage the brake push the pedal completely down.*

***HEIGHT ADJUSTMENT KNOB:*** *Use the height adjustment knob to adjust the mower height. With the attachement lift lever in the "up" position, turn knob clockwise (↷) to raise cutting height and counter-clockwise (↶) to lower mower cutting height. Lower attachment lift lever.*

***HEIGHT INDICATOR:*** *Indicates height setting of mower deck Controlled by height adjustment Knob.*

***GEARSHIFT:*** *Press the clutch/brake pedal down firmly and move gearshift lever to desired speed.*

***IGNITION:*** *Place key in ignition and turn to the right to start.*

***LIGHT SWITCH:*** *Turns the headlights on and off.*

***PARKING BRAKE:*** *To set the parking brake, push the clutch/brake pedal completely down. Hold the parking brake lever in "Engaged" position and release pressure from pedal. Clutch/brake pedal will remain in brake position. To release, push pedal in.*

***THROTTLE CONTROL:*** *Use the throttle control to increase or decrease the speed of the engine.*

***CHOKE:*** *To start a cold engine, pull choke out to engage.*



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# OPERATION

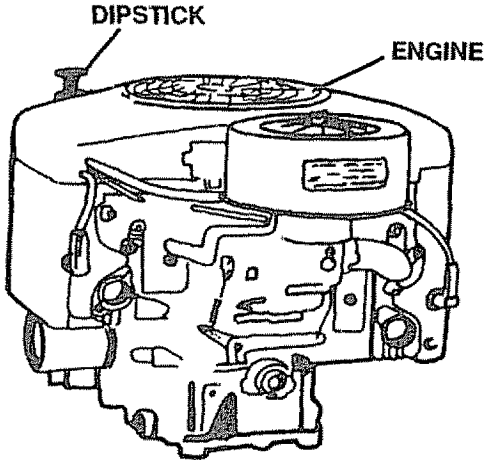


*FIGURE 12*

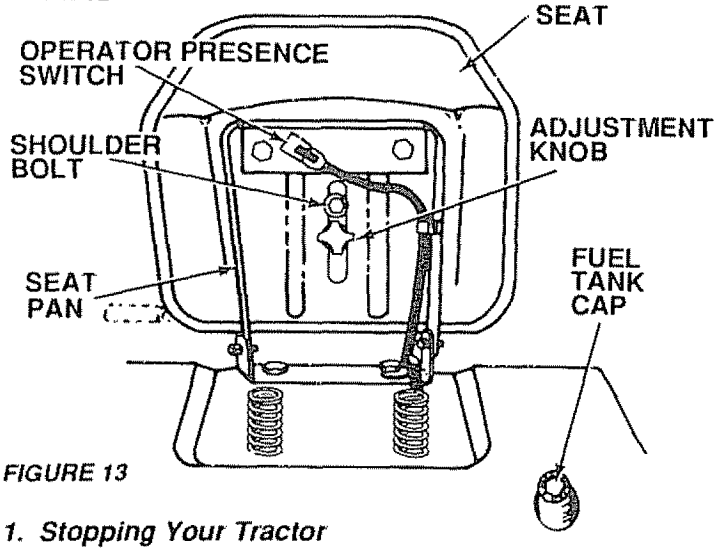


*FIGURE 13*

### *1. Stopping Your Tractor*

**KNOW HOW TO STOP YOUR TRACTOR BEFORE YOU ATTEMPT TO START THE ENGINE.**

NOTE: REMOVE KEY WHEN LEAVING TRACTOR TO PREVENT UNAUTHORIZED USE:

*a. Push clutch/brake pedal into full "BRAKE" position (Fig 14).*

*b. Move gear shift lever to "NEUTRAL" position (Fig. 15).*

*c. Place parking brake in "ENGAGED" position and release pressure from clutch/brake. Pedal should remain in "BRAKE" position (Fig. 14).*

NOTE: MAKE SURE PARKING BRAKE WILL HOLD TRACTOR SECURE.

*d. Place attachment clutch switch in "DISENGAGED" position (Fig. 15).*

*e. Move throttle control to "S" (slow) position (Fig. 15).*

*f. Turn ignition key to "OFF" position (Fig. 15).*

NOTE: NEVER USE CHOKE TO STOP ENGINE.

### *2. Starting the Engine*

**LEARN TO START, STOP AND REVERSE YOUR TACTOR IN A LARGE, OPEN AREA.**

**THIS TRACTOR IS EQUIPPED WITH INTERLOCK SWITCHES TO PREVENT STARTING OF THE TRACTOR ENGINE WHILE THE ATTACHMENT CLUTCH SWITCH IS IN THE "ENGAGED" POSITION AND/OR THE FOOT PEDAL IS NOT FULLY DEPRESSED. IMMEDIATELY REPLACE SWITCHES THAT ARE NOT IN PROPER WORKING ORDER. DO NOT ATTEMPT TO DEFEAT THE PURPOSE OF THESE SWITCHES.**

*a. This engine has been shipped filled with summer weight oil (For cold weather operation see chart page 15). Check engine oil level. See page 15.*

*b. Fill fuel tank (Fig. 13) Use fresh, clean, regular unleaded gasoline. (Use of leaded gasoline will increase carbon and lead oxide depsots and reduce valve life.) Capacity is 13 litres (3-1/2 gallons).*

NOTE: FRESH, CLEAN WINTER GRADE FUEL MUST BE USED TO INSURE GOOD COLD WEATHER STARTING.

CAUTION: EXPERIENCE INDICATES THAT ALCOHOL BLENDED FUELS (CALLED GASOHOL OR USING ETHANOL OR METHANOL) CAN ATTRACT MOISTURE WHICH LEADS TO SEPARATION AND FORMATION OF ACIDS DURING STORAGE. ACIDIC GAS CAN DAMAGE THE FUEL SYSTEM OF ANY ENGINE WHILE IN STORAGE.

TO AVOID ENGINE PROBLEMS, THE FUEL SYSTEM SHOULD BE EMPTIED BEFORE STORAGE FOR 30 DAYS OR LONGER. DRAIN THE GAS TANK, START THE ENGINE AND LET IT RUN UNTIL THE FUEL LINES AND CARBURETOR ARE EMPTY. USE FRESH FUEL NEXT SEASON. SEE STORAGE INSTRUCTIONS FOR ADDITIONAL INFORMATION.

NEVER USE ENGINE OR CARBURETOR CLEANER PRODUCTS IN THE FUEL TANK OR PERMANENT DAMAGE MAY OCCUR.

**FILL TO BOTTOM OF GAS TANK FILLER NECK. DO NOT OVERFILL. WIPE OFF ANY SPILLED OIL OR FUEL. DO NOT STORE, SPILL OR USE GASOLINE NEAR AN OPEN FLAME.**

*c. Place attachment clutch switch in "disengaged" position (Fig. 15).*

*d. Push clutch/brake pedal fully into brake position.*

*e. Place gear shift lever in "NEUTRAL" positon (Fig. 15).*

*f. Pull choke out (Fig. 15).*

*g. Move throttle control to middle position (Fig. 15).*

*h. Turn ignition key clockwise (↷) to "START" position and release key as soon as engine starts.*
NOTE: DO NOT RUN STARTER CONTINUOUSLY FOR MORE THAN FIFTEEN SECONDS PER MINUTE. *If engine does not start after several attempts, move throttle control to "F" (fast) position, wait a few minutes and try again.*

NOTE: IF YOU HAVE A WEAK BATTERY, SEE "STARTING YOUR TRACTOR WITH A WEAK BATTERY" (PAGE 20)

*i. After engine is warm, push choke in. The first time you start the engine, it will take extra cranking time to move fuel from tank to the engine.*



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NOTE: ALLOW ENGINE TO WARM UP FOR A FEW MINUTES BEFORE ENGAGING CLUTCH OF TRACTOR OR ATTACHMENT

*i When restarting a warm engine, move throttle control midway between "S" (slow) and "F" (fast) positions. Choke may not have to be used.*

**IMPORTANT: BEFORE DRIVING THE TRACTOR, INSTALL MOWER OR REMOVE MOWER PARALLEL LINK**

| FUNCTION | GEARSHIFT | THROTTLE |
|---|---|---|
| Normal Mowing | 2 OR 3 | FAST |
| Heavy Mowing | 1 OR 2 | |
| Snow Removal | 1 | |
| Tilling Plowing | 1 | MID THROTTLE |
| Dozing | 1 | SLOW-FAST |
| Grading | 2 | |
| Transport | 3-6 | |

*TABLE 1*

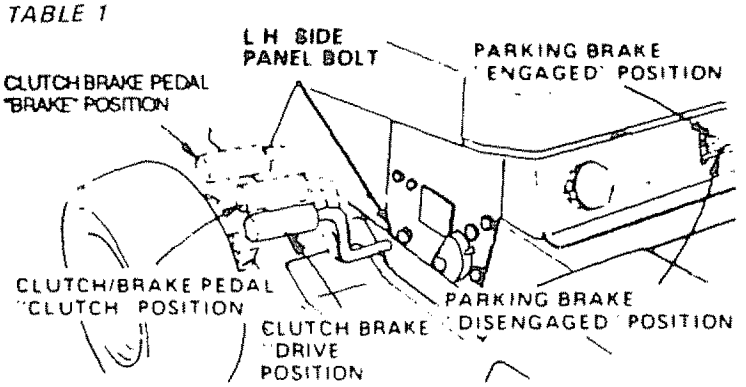
L H SIDE PANEL BOLT
PARKING BRAKE "ENGAGED" POSITION
CLUTCH BRAKE PEDAL "BRAKE" POSITION
CLUTCH/BRAKE PEDAL "CLUTCH" POSITION
CLUTCH BRAKE "DRIVE" POSITION
PARKING BRAKE "DISENGAGED" POSITION

*FIGURE 14*

**READ THE "RULES FOR SAFE OPERATION" CAREFULLY BEFORE OPERATING YOUR MOWER**

THE MOWER MUST BE ADJUSTED PROPERLY FROM FRONT TO REAR AND LEVELED FROM SIDE TO SIDE BEFORE OPERATING. THIS IS NECESSARY FOR LEVEL AND EFFICIENT MOWING. REFER TO PAGE 21

CAUTION: DO NOT ADD ADDITIONAL WEIGHT TO THE TRACTOR OTHER THAN THE OPTIONAL WHEEL WEIGHTS. EXCESSIVE WEIGHT MAY OVERLOAD AND DAMAGE THE TRANSMISSION

**DO NOT OVERLOAD TRACTOR BY TOWING WEIGHTS GREATER THAN 150 POUNDS (68 kg).**

### *3. Operating Your Tractor and Mower*

NOTE: THIS TRACTOR IS EQUIPPED WITH AN OPERATOR PRESENCE SENSING SWITCH. ANY ATTEMPT BY THE OPERATOR TO LEAVE THE SEAT WITH THE ENGINE RUNNING AND THE ATTACHMENT CLUTCH SWITCH ENGAGED WILL SHUT OFF THE ENGINE.

## CAUTION
## TO AVOID INJURY

1 *Read owner's manual*
2 *Know the location and function of all controls*
3 *Keep guards, safety shields and switches in place and working*
4 *Remove objects that can be thrown by blades*
5 *Do not mow when children and others are around*
6 *Never carry children or passengers*
7 *Always look behind machine before backing*
8 *Do not mow where machine can tip or slip*
9 *If machine stops going uphill, stop blade and back slowly down*
10 *Be sure blades and engine have stopped before placing hands or feet near the blades*
11 *Remove key when leaving machine*

**MAKE SURE PARKING BRAKE WILL HOLD TRACTOR SECURE**

**NEVER PLACE YOUR HANDS OR FEET IN OR UNDER ANY POWERED ATTACHMENT OR NEAR ANY MOVING PART WHILE TRACTOR OR ANY POWERED ATTACHMENT IS RUNNING.**

NOTE: ALWAYS OPERATE ENGINE AT FULL THROTTLE WHEN MOWING TO ASSURE BETTER MOWING PERFORMANCE AND PROPER DISCHARGE OF CUT MATERIAL. REGULATE GROUND SPEED BY SELECTING A LOW ENOUGH GEAR (TABLE 1) TO GIVE THE MOWER CUTTING PERFORMANCE PLUS QUALITY OF CUT DESIRED

**DO NOT OPERATE THE MOWER WITHOUT EITHER THE ENTIRE GRASS CATCHER, ON MOWERS SO EQUIPPED, OR THE DEFLECTOR SHIELD IN PLACE.**

a *Select desired height of cut position using height adjustment knob (Fig. 15)*
b *Raise lift lever and place attachment clutch switch in disengaged position*
c *Push clutch/brake pedal down firmly (Fig. 14)*
d *Start engine (page 12).*
e *With engine running and warm place throttle control midway between "S" (slow) and "F" (fast) position*
f *Engage mower with the attachment clutch switch*
g *Move gear shift lever to desired gear*
h *Lower mower into cutting position using attachment lift lever.*
i *Release clutch/brake pedal to start movement (Fig. 14).*
j *Move throttle control to "F" (Fast) postion.*

NOTE: SELECT A GROUND SPEED THAT WILL SUIT THE TERRAIN, QUALITY OF CUT AND ATTACHMENT BEING USED (TABLE 1).

# OPERATION

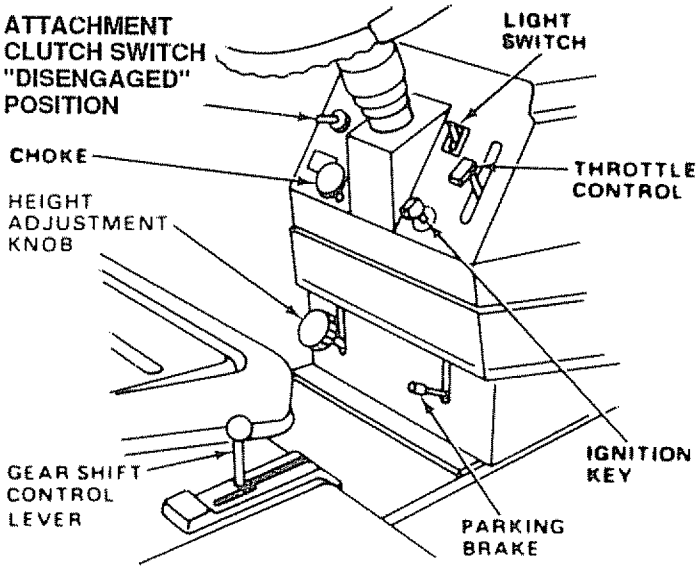


*FIGURE 15*

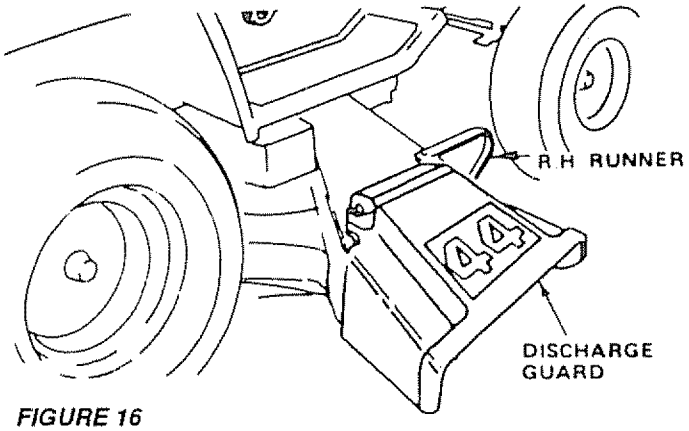


*FIGURE 16*

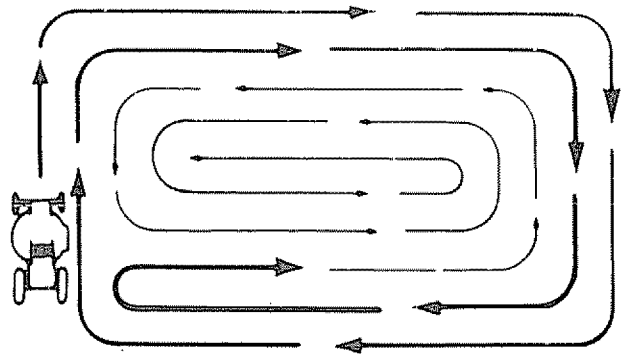

*FIGURE 17*

### 4 *Mowing Tips*

NOTE: TIRE CHAINS CANNOT BE USED WITH THE MOWER HOUSING ATTACHED.

**READ THE "SAFETY RULES" CAREFULLY BEFORE OPERATING YOUR MOWER. REFER TO PAGE 2.**

*a Use the runner on the R.H. side as a guide; the blade cuts approximately 2.54 cm (1 inch) outside the runner (Fig. 16).*

*b Drive so that clippings are discharged onto the area that has been cut. Have the cut area to the right of the machine. This will result in a more even distribution of clippings and more uniform cutting.*

*c When mowing large areas (Fig. 17), start by turning to the right so that the clippings will discharge away from shrubs, fences, driveways, etc. After one or two rounds, mow in the opposite direction making left hand turns until finished.*

*d If grass is extremely tall, it should be mowed twice. The first time cut relatively high, the second time to the desired height.*

*e The left hand side of mower should be used for trimming.*

*f Do not mow tall, dry grass over 15.25 cm (6 inches) tall. It is a fire hazard.*

### 5 *Operating The Tractor On Hills*

**DO NOT DRIVE UP OR DOWN HILLS WITH SLOPES GREATER THAN 15° AND DO NOT DRIVE ACROSS ANY SLOPE. REFER TO PAGE 55.**

*a Move gear shift lever to "1ST" gear before starting up or down hills.*

*b AVOID STOPPING OR SHIFTING ON HILLS.*

*c If slowing is necessary, move throttle control lever to slower position.*

LEAVE ENOUGH ROOM WHEN STOPPING AND STARTING TO ALLOW SLIGHT TRACTOR ROLL DOWNHILL AS CLUTCH/BRAKE PEDAL MOVES THROUGH CLUTCH POSITION.

*d If stopping is absolutely necessary, push clutch/brake pedal quickly to brake position and engage parking brake.*

*e To restart tractor movement, make sure tractor is in the lowest speed range ("1ST" Gear) and that you have allowed room to roll slightly downhill. Depress clutch/brake full. Disengage parking brake and release clutch/brake pedal SLOWLY to start tractor movement.*

*f Make all turns gradually.*

### 6 *Flip-Up Discharge Guard*

*Your mower has a flip-up discharge guard (Fig. 16) for door or gate clearance when held in raised position.*

**MAKE SURE ATTACHMENT CLUTCH SWITCH IS IN "DISENGAGED" POSITION AND BLADES HAVE STOPPED BEFORE RAISING DISCHARGE GUARD (DEFLECTOR). NEVER OPERATE MOWER WITHOUT DISCHARGE GUARD IN OPERATING POSITION.**



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# MAINTENANCE

***To keep your tractor running better, longer, perform necessary service using the following maintenance schedule:***

BEFORE MAKING ANY INSPECTION ADJUSTMENT OR REPAIR:

1. PUSH TRACTOR CLUTCH BRAKE PEDAL COMPLETELY INTO BRAKE POSITION
2. MOVE GEAR SHIFT LEVER TO NEUTRAL" POSITION
3. PLACE PARKING BRAKE IN ENGAGED POSITION REMOVE FOOT FROM PEDAL
4. PLACE ATTACHMENT CLUTCH SWITCH IN DISENGAGED POSITION
5. TURN IGNITION KEY TO OFF POSITION
6. MAKE ABSOLUTELY SURE THE BLADES AND ALL MOVING PARTS HAVE COMPLETELY STOPPED
7. REMOVE THE IGNITION KEY
8. DISCONNECT THE SPARK PLUG WIRES FROM THE SPARK PLUGS AND KEEP AWAY FROM THE SPARK PLUGS TO PREVENT INJURY FROM ACCIDENTAL STARTING. BE CAREFUL TOO AVOID TOUCHING HOT ENGINE OR MUFFLER COMPONENTS

### *With Every Mowing*

1. *Make sure all nuts on bolts are tight and cotter pins and retainer springs are secure.*
2. *Observe all safety precautions.*
3. *Keep tractor well lubricated (refer to page 19).*

### *First 2 Hours (Two Mowings)*

#### *1. Change Engine Oil*

*Changing oil after the first two hours (or two mowings) will help eliminate break-in residue which might be damaging to your engine.*

NOTE: BE CAREFUL NOT TO ALLOW DIRT TO ENTER THE ENGINE WHEN CHANGING OIL.

a. *Drain oil with engine warm.*

b. *Loosen oil drain plug (Fig. 18) and remove dipstick (Fig. 19).*

c. *Catch oil in a suitable container.*

d. *Tighten oil drain plug.*

e. *Refill engine oil (see chart at right). Refill capacity without oil filter change is 3-1/2 pints (1.7 litres). With oil filter change (page 18), capacity is 4 pints (1.9 litres).*

NOTE: DO NOT OVERFILL.

f. *Replace dipstick (Fig. 19) then remove dipstick and read oil level. Make sure oil level is at the "FULL" mark on dipstick. Add or remove oil as indicated on dipstick.*

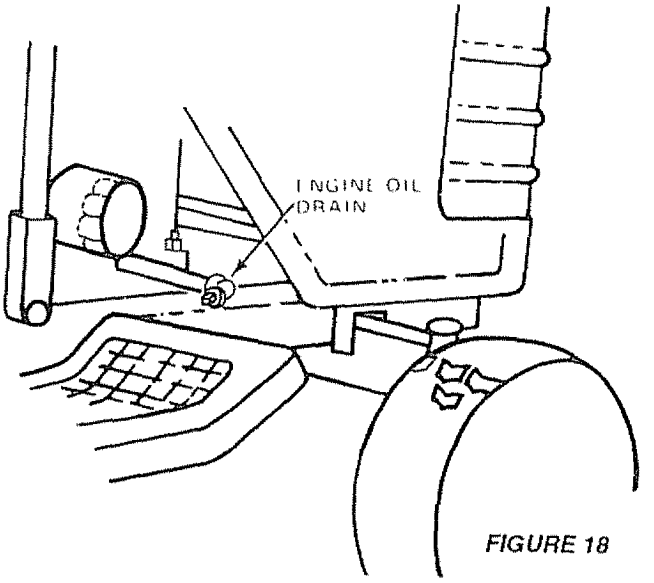
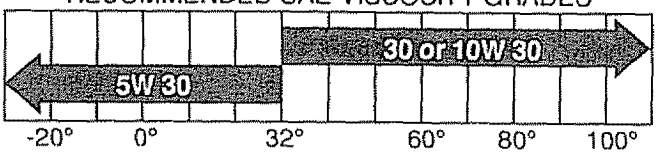



*FIGURE 18*

### *Recommended SAE Viscosity Grades*

*Determine temperature range expected before next oil change. All oil must meet A.P.I. service classification SD, SE or SF.*

RECOMMENDED SAE VISCOSITY GRADES




*Dipstick assembly must be securely tightened into tube at all times when engine is operating.*

CAUTION: TO AVOID DAMAGE TO THE STARTING SYSTEM, USE SAE 5W30 OIL WHEN THE TEMPERATURE FALLS BELOW 0° C (32° F).

### *Every 5 Hours (Five Mowings)*

#### *1 Check Engine Oil Level*

**DO NOT CHECK ENGINE OIL LEVEL WITH ENGINE RUNNING.**

*Several minutes after stopping engine, check engine oil level with tractor on level ground. Wipe dipstick (Fig. 19) clean, screw it down tight for a few seconds, remove and read oil level. If necessary, add oil until "FULL" mark is reached. (See chart above.)* NOTE: DO NOT OVERFILL.

# MAINTENANCE

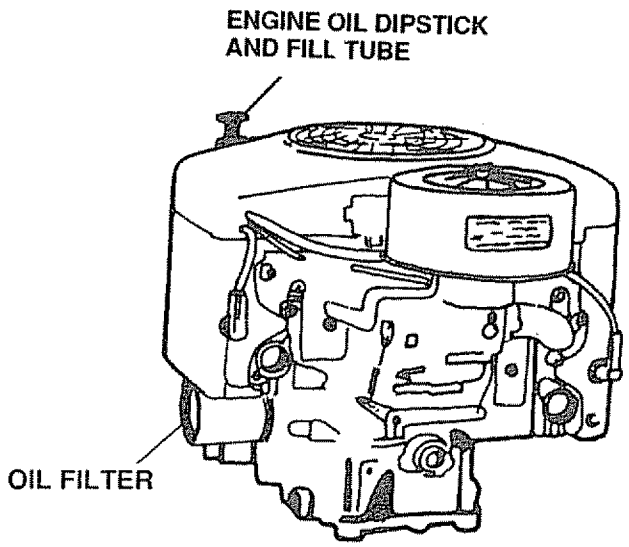



*FIGURE 19*

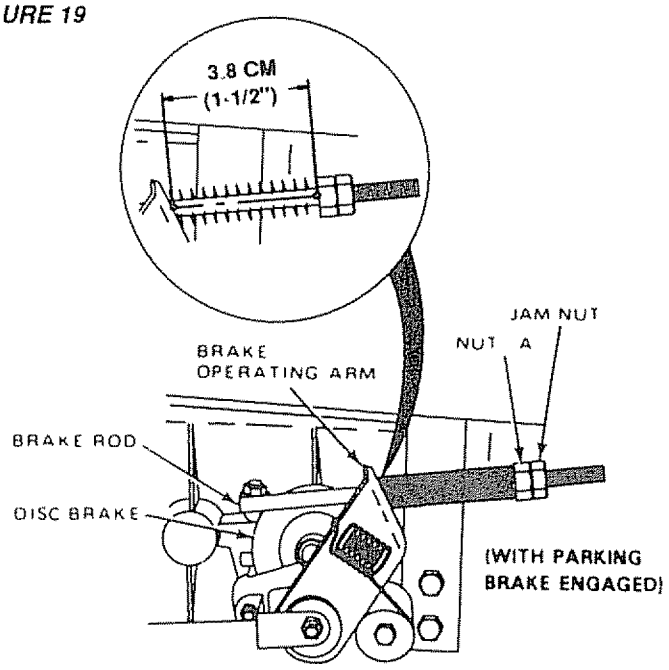



*FIGURE 20*

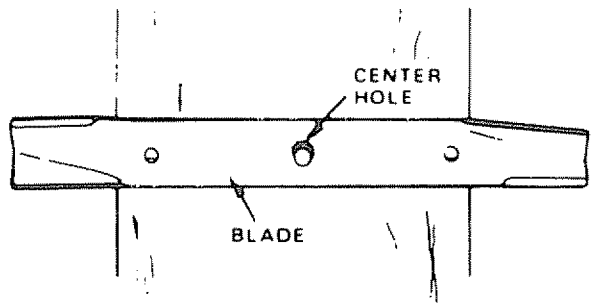



*FIGURE 21*

## *Every 25 Hours (Twice a Mowing Season)*

### *1. Brake Adjustment*

*This Tractor is equipped with an adjustable brake system mounted on the right side of the transaxle (Fig. 20).*

**IF TRACTOR REQUIRES MORE THAN 1.8 METRES (SIX FEET) STOPPING DISTANCE IN HIGHEST GEAR, THEN BRAKE MUST BE ADJUSTED.**

a. *Depress clutch/brake pedal and engage parking brake.*

b. *Measure distance between brake operating arm and nut "A" on brake rod.*

c. *If distance is other than 3.8 cm (1-1/2"), loosen jam nut (Fig. 20) and turn nut until distance becomes 3.8 cm (1-1/2"). Retighten jam nut against nut "A"*

*Road test tractor for proper stopping distance as stated above. Readjust if necessary.*

### *2. Tire Care*

a. *Maintain tire pressure in front at 14 PSI (1 Kg/cm²) and rear tires at 10 PSI (0.7 Kg/cm²).*

b *Keep tires free of gasoline, oil, or insect control chemicals which can harm rubber.*

c *Avoid stumps, stones, deep ruts and other hazards that may cause tire damage.*

### *3 Blade Sharpening*

For best results mower blades must be kept sharp. The blades can be sharpened with a few strokes of a file or on a grinding wheel. We suggest they be sharpened after every 25 hours of mowing. Do not attempt to sharpen while on mower. If you mow in sandy soil check the blades after each two mowings. The sand wears the blades away rapidly.

a *When grinding care should be taken to maintain blade balance and the blade should be checked for proper balance before reinstallation on mower. Unbalanced or bent blade will cause excessive vibration when running, and eventual damage to mower or engine. Replace bent or damaged blades*

b. *To check blade balance, drive a nail into a beam or wall. Leave about one inch (25.4 mm) of the straight nail exposed. Place center hole of clean blade over the head of the nail (Fig. 21).* NOTE: CENTER HOLE OF BLADE ON NAIL. IF BLADE IS PROPERLY BALANCED, BLADE SHOULD REMAIN IN POSITION SHOWN IN FIG. 21. IF EITHER END OF THE BLADE MOVES DOWNWARD, BLADE IS NOT BALANCED. SHARPEN THE HEAVY END UNTIL BLADE IS BALANCED.

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## Every 50 Hours (Once a Mowing Season)

*(Operating in dusty conditions may require more frequent servicing.)*

**1 Check Battery**

- a Battery acid level in each battery cell should be even with bottoms of tubes in cells (Fig. 22). Add ONLY distilled water if necessary. NOTE: DO NOT OVERFILL.
- b Keep battery and terminals clean.
- c Keep battery bolts tight.
- d Keep vent caps tight and small vent holes in caps open.
- e Recharge at 6 amperes for 1 hour if necessary.

NOTE: OVERCHARGING WILL SHORTEN BATTERY LIFE.

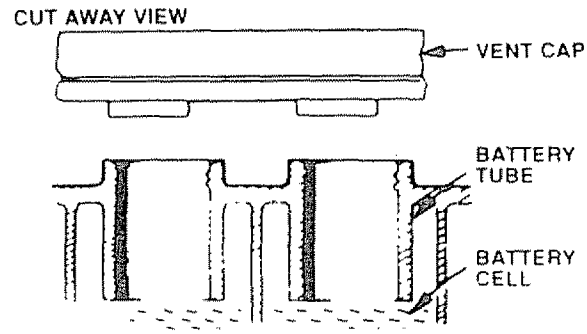


FIGURE 22

**2 Clean Battery and Terminals**

Corrosion and dirt on the battery and terminals cause the battery to "leak" power.

> LEAD-ACID BATTERIES GENERATE EXPLOSIVE GASES. KEEP SPARKS, FLAME AND SMOKING MATERIALS AWAY FROM BATTERIES. ALWAYS SHIELD YOUR EYES AROUND BATTERIES.

- a Remove terminal guard.
- b Disconnect BLACK battery cable then RED battery cable and remove battery from tractor.
- c. Wash battery with 60 grams (1/4 cup) of baking soda to 3.8 litres (1 gallon) water.

NOTE: BE CAREFUL NOT TO GET THE SODA SOLUTION INTO THE CELLS.

- d Rinse the battery with plain water, dry and reinstall on tractor.
- e Clean terminals and battery cable ends with wire brush until bright.
- f Replace battery cables, connecting RED battery cable to positive terminal first, then BLACK battery cable to negative terminal. Coat terminal connections with petroleum jelly.
- g Replace terminal guard.

**3 Change Engine Oil**

The best time to change engine oil is at the end of a day's operation when all dirt and foreign materials are suspended in the hot oil. See chart, page 15.

**(OPERATING IN DUSTY CONDITIONS MAY REQUIRE MORE FREQUENT SERVICING)**

**4 Clean Air Cleaner Foam Pre-Cleaner** (Fig. 23)

- a. Remove Wing Nut and cover.
- b. Remove foam pre-cleaner element by sliding it off of the paper cartridge.
- c. Wash foam pre-cleaner in liquid detergent and water.
- d. Wrap foam pre-cleaner in cloth and squeeze dry.
- e. Lightly coat foam pre-cleaner with engine oil (Do not saturate). Squeeze in rag or towel to remove excess oil.
- f. Install foam pre-cleaner over paper cartridge. Reassemble cover and screw down tight.

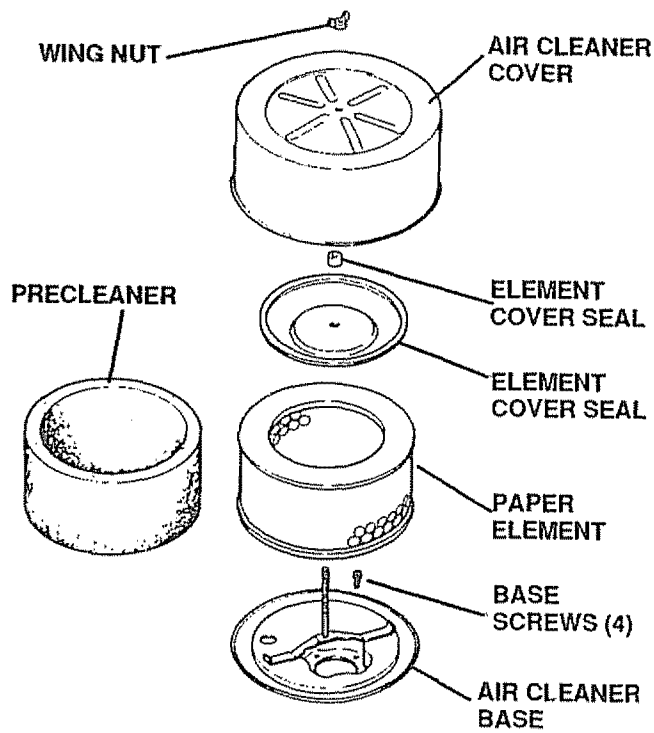


FIGURE 23

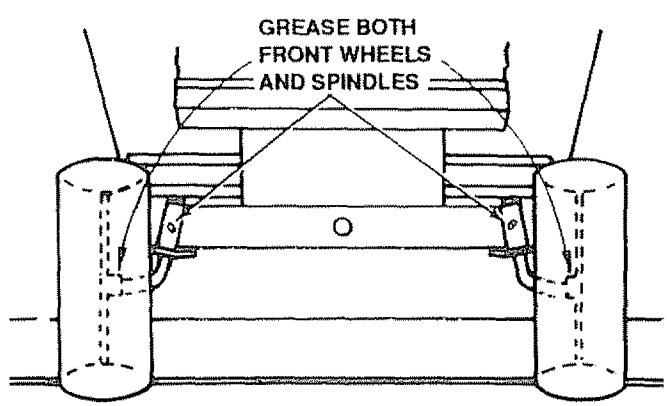


FIGURE 24

# MAINTENANCE

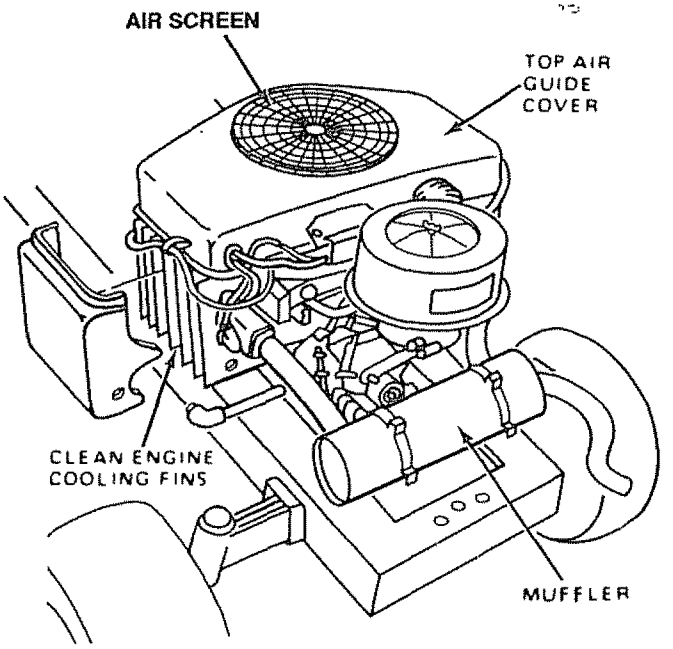


FIGURE 25

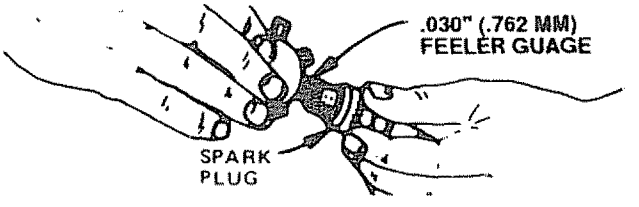


FIGURE 26

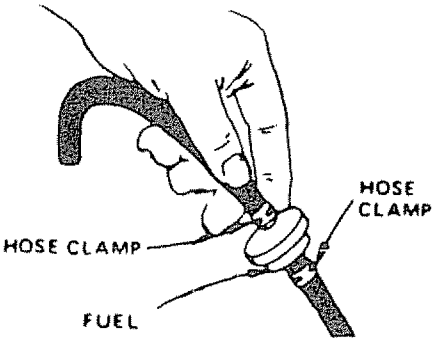


FIGURE 27

### 5. Lubricate Steering and Front Wheels

*There is a grease fitting on each front wheel and axle spindle. Use a grease gun to give each grease fitting two shots of extreme pressure lubricating grease (available through your Sears Service Center)(Fig. 24).*

### 6. Oil Pivot Points

*Place several drops of SAE 30 oil at points where metal parts move against each other, especially:*

a. *Hood hinges.*

b. *Shifter shaft points.*

*SEE LUBRICATION CHART, PAGE 19.*

### 7. Clean Air Screen

*Air screen (Fig. 25) must allow free-flow of air to prevent engine damage from overheating. Clean with a wire brush, compressed air or water pressure to remove dirt, chaff, stubborn dried gum and fibers.*

**ALWAYS WEAR SAFETY GLASSES WHEN USING COMPRESSED AIR.**
**DO NOT TOUCH HOT MUFFLER, CYLINDER OR FINS AS CONTACT MAY CAUSE BURNS.**

### 8. Inspect Muffler

*Inspect and replace corroded muffler as it could create a fire hazard and/or damage (Fig. 25).*

### 9. Clean Engine Cooling Fins

*Remove any dust, dirt or oil from engine cooling fins to prevent engine damage from overheating. Air guide covers must be removed (Fig. 25). Remove bolts to remove side and top covers. See "HOOD REMOVAL," page 21.*

**DO NOT TOUCH HOT MUFFLER, CYLINDER OR FINS AS CONTACT MAY CAUSE BURNS.**

## Every 100 Hours

**DISCONNECT SPARK PLUG WIRES TO PREVENT ACCIDENTAL STARTING BEFORE MAKING ANY INSPECTION, ADJUSTMENT OR REPAIR (EXCEPT CARBURETOR). BE CAREFUL TO AVOID TOUCHING HOT ENGINE OR MUFFLER COMPONENTS.**

### 1. Replace Spark Plugs

*Replace spark plugs at the beginning of each mowing season or every 100 hours, whichever comes first. Gap should be set at 0.030" (0.762 mm). (Fig. 26).*

### 2. Replace Air Cleaner Paper Cartridge

*Refer to page 17.*

### 3. Replace In-Line Fuel Filter

*If fuel filter is clogged, obstructing fuel flow to carburetor, replacement is required.*

a. *With engine cool, remove filter and plug fuel line sections as removed from both ends of fuel filter (Fig. 27).*

b. *Place new fuel filter in position in fuel line. Be sure there are no fuel line leaks and that fuel line is in proper position in hose clamps.*

**BE SURE THERE ARE NO FUEL LINE LEAKS AND THAT FUEL LINE IS IN PROPER POSITION IN HOSE CLAMPS.**

### 4. Change Engine Oil Filter

a. *Drain crankcase of oil (refer to "CHANGE ENGINE OIL," page 15, through step d). Remove old filter (Fig. 19) by turning counterclockwise.*

b. *Before installing new filter, apply a thin coating of oil on surface of the rubber seal.*

c. *Install new filter by turning clockwise until rubber seal contacts the filter adapter, then tighten the filter an additional 1/2 turn.*

d. *Refill crankcase with engine oil (see page 15 for oil specifications). Add an additional 1/2 pint (.24 litres) oil for the new filter capacity.*

e. *Start the engine. Check for and correct any oil leaks.*

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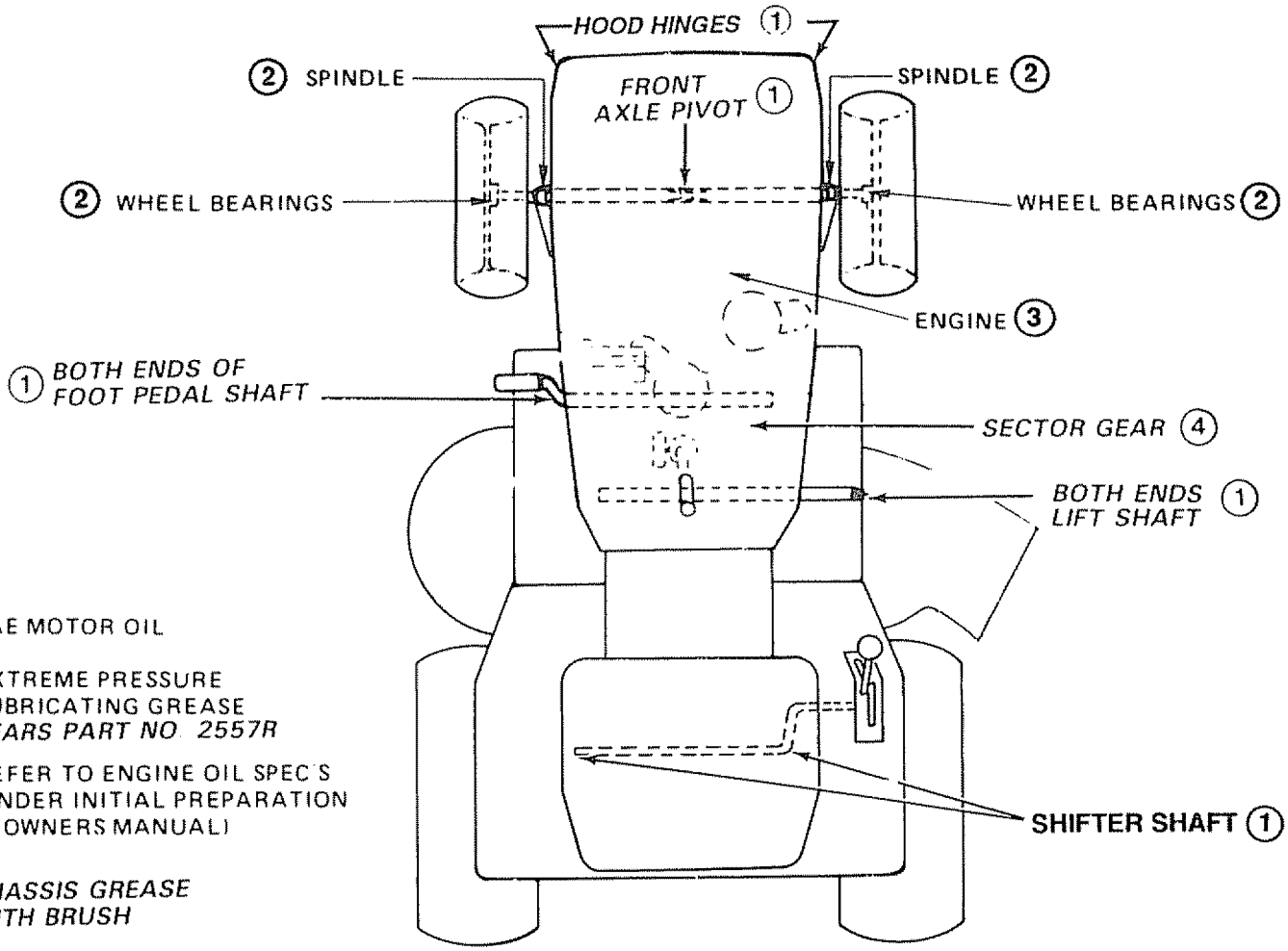
# MAINTENANCE

## Lubrication




(1) SAE MOTOR OIL

(2) EXTREME PRESSURE LUBRICATING GREASE *SEARS PART NO. 2557R*

(3) REFER TO ENGINE OIL SPEC'S (UNDER INITIAL PREPARATION IN OWNERS MANUAL)

(4) *CHASSIS GREASE WITH BRUSH*

# REPAIR & ADJUSTMENT

FOR ANY ADJUSTMENTS, INSPECTION OR MAINTENANCE:

1. PUSH TRACTOR CLUTCH/BRAKE PEDAL COMPLETELY INTO BRAKE POSITION
2. MOVE GEAR SHIFT LEVER TO 'NEUTRAL POSITION
3. PLACE PARKING BRAKE IN 'ENGAGED POSITION' REMOVE FOOT FROM PEDAL
4. PLACE ATTACHMENT CLUTCH SWITCH IN 'DISENGAGED' POSITION
5. TURN IGNITION KEY TO 'OFF' POSITION
6. MAKE ABSOLUTELY SURE THE BLADES AND ALL MOVING PARTS HAVE COMPLETELY STOPPED
7. REMOVE THE IGNITION KEY
8. DISCONNECT THE SPARK PLUG WIRES FROM THE SPARK PLUGS AND KEEP AWAY FROM THE SPARK PLUGS TO PREVENT INJURY FROM ACCIDENTAL STARTING. BE CAREFUL TOO AVOID TOUCHING HOT ENGINE OR MUFFLER COMPONENTS

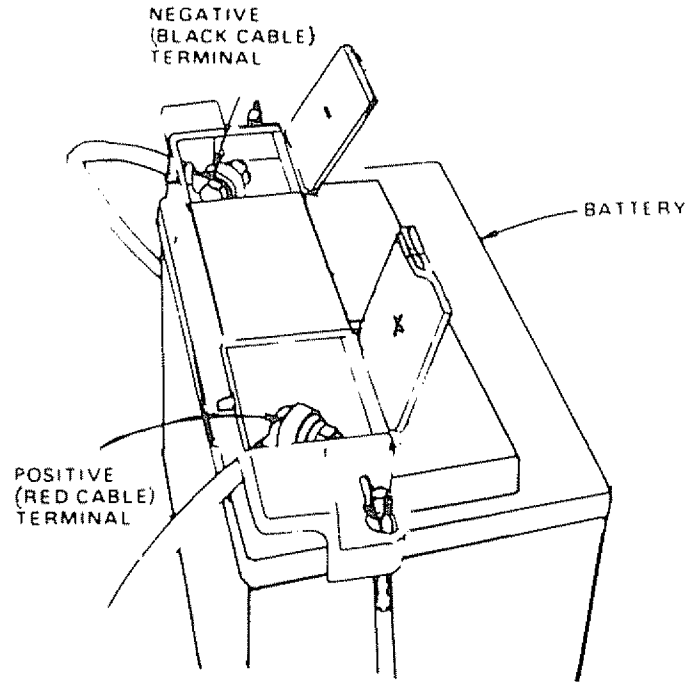



*FIGURE 28*

# REPAIR & ADJUSTMENTS

**LEAD–ACID BATTERIES GENERATE EXPLOSIVE GASES. KEEP SPARKS, FLAME AND SMOKING MATERIALS AWAY FROM BATTERIES. ALWAYS WEAR EYE PROTECTION WHEN AROUND BATTERIES.**

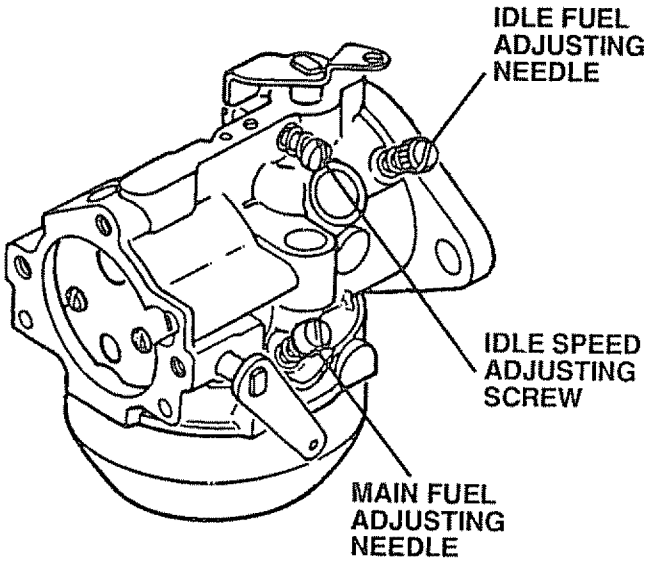



*FIGURE 29*

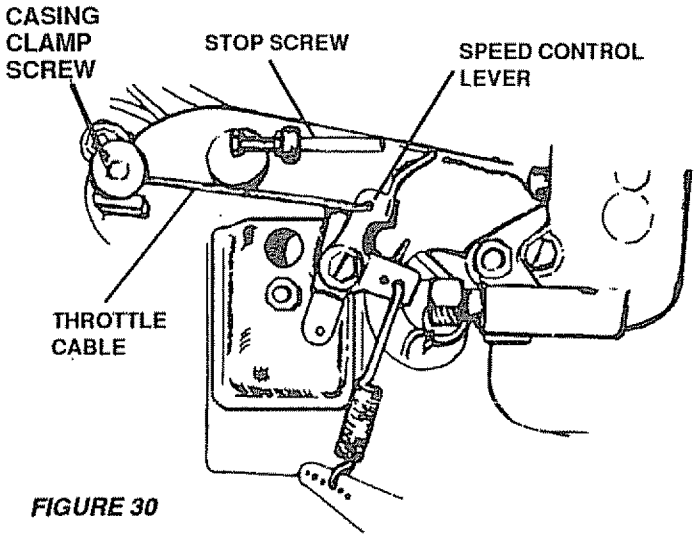



*FIGURE 30*

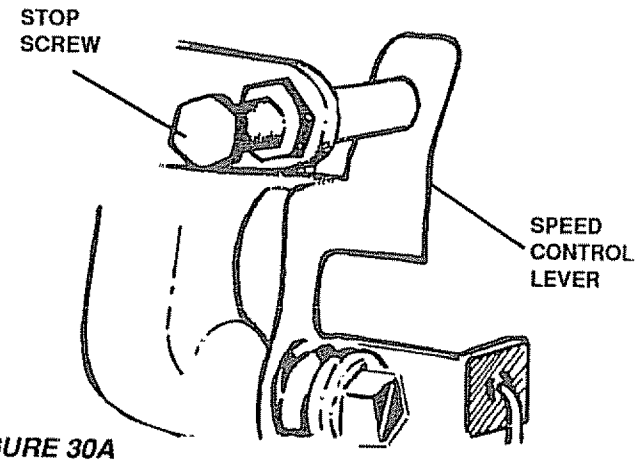



*FIGURE 30A*

***1. Starting your Tractor With a Weak Battery***

*If your battery is too weak to start the engine, it should be recharged. If "jumper cables" are used for emergency starting, follow this procedure:*

NOTE: YOUR TRACTOR IS EQUIPPED WITH A 12 VOLT NEGATIVE GROUNDED SYSTEM. THE OTHER VEHICLE MUST ALSO BE A 12 VOLT NEGATIVE GROUNDED SYSTEM.

a. *Connect each end of the **RED** jumper cable to the POSITIVE(+) terminals of each battery (taking care not to short against chassis). (Fig. 28)*
b. *Connect one end of the **BLACK** jumper cable to the NEGATIVE (–) terminal of fully charged battery.*
c. *Connect the other end of the **BLACK** jumper cable to the L.H. side panel bolt (Fig. 14) NOTE: KEEP AWAY FROM GAS TANK AND BATTERY.*
d. *Disconnect cables in reverse order:*
   1. *L.H. side panel bolt (Fig. 14)*
   2. *Negative terminal of fully charged battery*
   3. *Positive terminals*

DO NOT USE YOUR TRACTOR BATTERY TO START OTHER VEHICLES.

*2 Throttle Control Cable Adjustment*

*Never attempt to change maximum engine speed. This is preset at the factory (3600 rpm ± 75 rpm) and should only be changed by a qualified service technician who has the necessary equipment.*

a. *Remove hood (Fig. 32).*
b. *Loosen casing clamp screw (Fig. 30) until throttle cable is free to move.*
c. *Move throttle control (on dashboard) to "FAST" position.*
d. *Pull throttle cable tight (until speed control lever (Fig. 30A) is against stop screw (Fig. 30A). Retighten casing clamp screw.*

REFER TO "STARTING THE ENGINE" PAGE 12.

***3. Carburetor Adjustment***

*In general, turning the adjusting needles (Fig. 29) in (clockwise) decreases the supply of fuel to the carburetor. This gives a leaner fuel/air mixture. Turning the adjusting needles (Fig. 29) out (counterclockwise) increases the supply of fuel to the carburetor. This gives a richer fuel/air mixture. Setting the needles midway between the lean and rich positions will usually give the best results.*

*Adjust the carburetor as follows:*

a. *With the engine stopped, turn the idle fuel adjusting needle in (clockwise) until it bottoms lightly.*
   *NOTE: The tip of the idle fuel and main fuel adjusting needles are tapered to critical dimensions. Damage to the needles and the seats in carburetor body will result if the needles are forced.*
b. *Preliminary settings: Turn the adjusting needles out (counterclockwise) from lightly bottomed. Turn the idle 1-1/4 turns, turn the main 1 turn.*
c. *Start the engine and run at half throttle for five to ten minutes to warm up. The engine must be warm before making final settings (Steps d, e, f, and g).*
d. *Place the throttle into the "fast" position.*



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1. Turn the main fuel adjusting needle out (counter-clockwise) from the preliminary setting until the engine speed decreases (rich).
2. Now turn the adjusting needle in (clockwise). The engine speed may increase, then it will decrease as the needle is turned in (lean).
3. Now set the adjusting needle midway between the rich and lean settings.

e. Idle Speed Setting: Place the throttle control into the "idle" or "slow" position. Set the idle speed to 1200 rpm adjusting screw in or out.

f. Idle Fuel Needle Setting: Place the throttle into the "idle" or "slow" position.
1. Turn the idle fuel adjusting needle out (counter-clockwise) from the preliminary setting until the engine speed decreases (rich).
2. Now turn the adjusting needle in (clockwise). The engine speed may increase, then it will decrease as the needle is turned in (lean).
3. Set the adjusting needle midway between the rich and lean settings.
4. Recheck the idle speed. Readjust the speed as necessary.

### 4. Fuse Replacement

Replace with 30 amp automotive-type plug in fuse. Fuses can be purchased at all Sears Service Centers and most retail stores. Fuse is located directly behind dash.

### 5. Hood Removal

a. Lift hood. Disconnect headlight wiring connection (Fig. 32).

b. Unscrew one screw at rear of each side panel (Fig. 31).

c. Pivot hood and side panel forward and lift off tractor (Fig. 32).

d. To replace, reverse above procedure.

### 6. Mower Adjustment

Adjust the mower while tractor is parked on level ground or driveway. Make sure tire pressures are 1 Kg/cm² (14 PSI) in front and 0.71 Kg/cm² (10 PSI) in rear. If tires are over or under inflated, you will not properly adjust your mower.

FOR ANY ADJUSTMENTS INSPECTION OR MAINTENANCE:

1. PUSH TRACTOR CLUTCH BRAKE PEDAL COMPLETELY INTO 'BRAKE' POSITION
2. MOVE GEAR SHIFT LEVER TO "N" (NEUTRAL) POSITION
3. PLACE PARKING BRAKE IN ENGAGED POSITION. REMOVE FOOT FROM PEDAL
4. PLACE ATTACHMENT CLUTCH SWITCH IN 'DISENGAGED' POSITION
5. TURN IGNITION KEY TO 'OFF' POSITION
6. MAKE ABSOLUTELY SURE THE BLADES AND ALL MOVING PARTS HAVE COMPLETELY STOPPED
7. REMOVE THE IGNITION KEY
8. DISCONNECT THE SPARK PLUG WIRE(S) FROM THE SPARK PLUG(S) AND KEEP WIRE(S) AWAY FROM THE PLUG(S) TO PREVENT INJURY FROM ACCIDENTAL STARTING. BE CAREFUL TO AVOID TOUCHING HOT ENGINE OR MUFFLER COMPONENTS

#### Height Adjustment

Adjustment for mower height is made with the height adjustment knob. Raise mower cutting height by turning height adjustment knob clockwise ( ). Lower mower cutting height by turning height adjustment knob counterclockwise ( ) (Fig. 33)

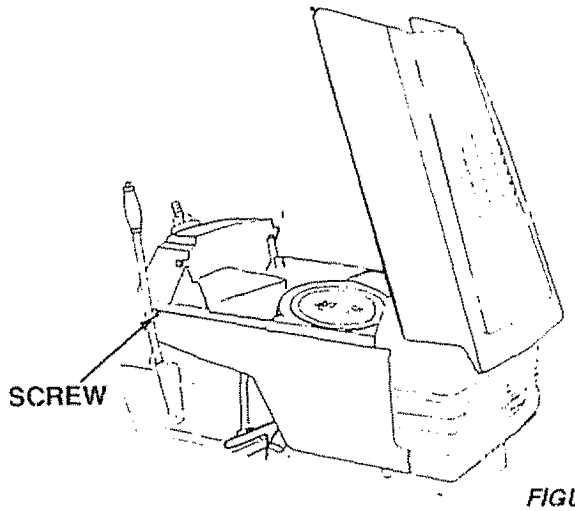


FIGURE 31

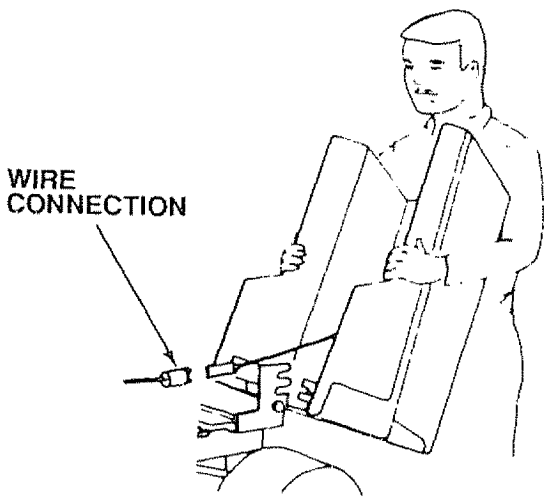


FIGURE 32

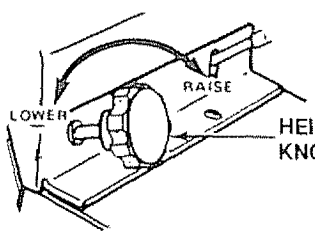


FIGURE 33

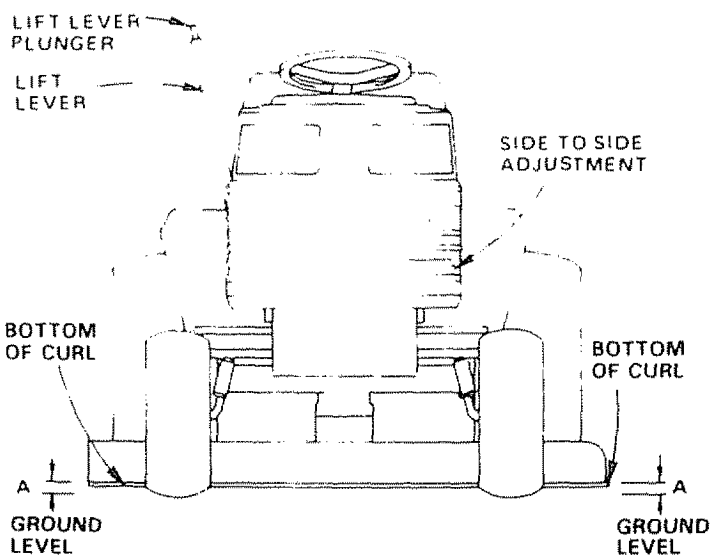


FIGURE 34

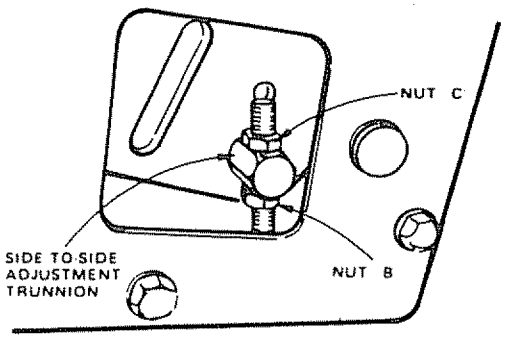


FIGURE 35

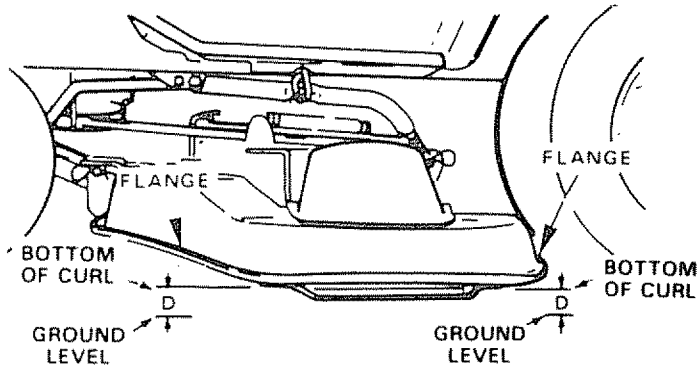


FIGURE 36

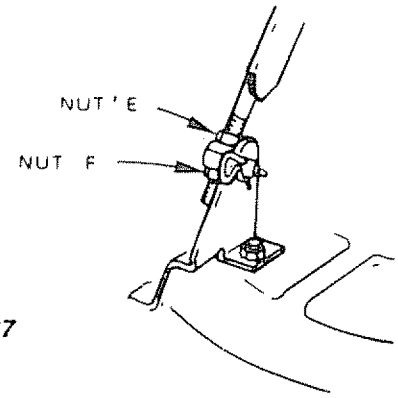


FIGURE 37

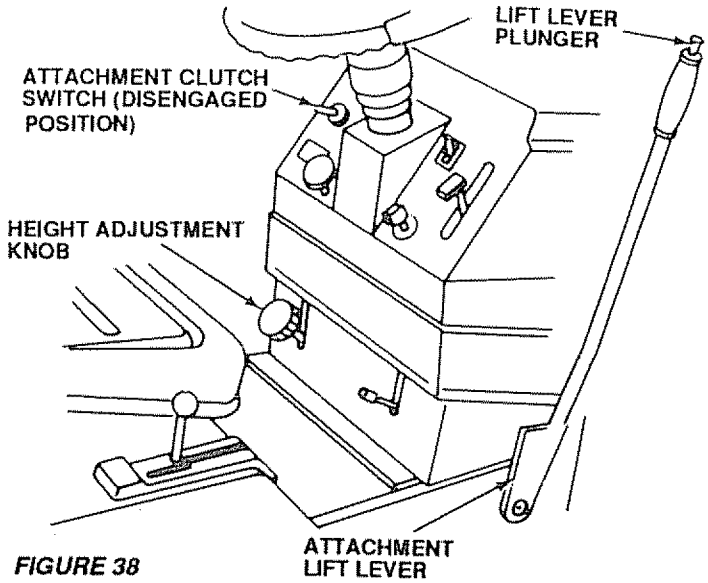


FIGURE 38

***Side-to-Side mower Adjustment***

a. *Depress lift lever plunger and use lift lever to raise mower to maximum cutting height (Fig. 34).*

b. *Measure height from bottom of curl to ground level at front of mower. Distance "A" should be the same (Fig. 34).*

c. *If distance "A" needs to be changed, snap out access hole cover on L.H. side above footrest. Use 11/16" wrench on nuts "B" and "C" at side-to-side adjustment trunnion (Fig. 35).*

d. *To raise left side of mower, loosen nut "B" and tighten nut "C".*

e. *To lower left side of mower, loosen nut "C" and tighten nut "B".*

NOTE: ONE ROTATION OF ADJUSTMENT NUTS IS EQUIVALENT TO APPROXIMATELY 5 MM (3/16") HEIGHT CHANGE.

f. *Be sure all nuts are securely tightened.*

***Front-To-Rear Mower Adjustment***

a. *To obtain the best cutting results, your mower housing should be adjusted so the front and rear flange distance "D" (Fig. 36) is 13 mm (1/2") lower in front when the mower is positioned in the highest cutting position.*

NOTE: MEASURE DISTANCE "D" FROM GROUND LEVEL TO BOTTOM OF CURL ON RIGHT REAR FLANGE AND COMPARE TO DISTANCE "D" AT RIGHT FRONT FLANGE.

b. *To raise rear of mower, loosen nut "E" on both rear suspension arms. Screw both nuts "F" up an EQUAL NUMBER OF TURNS (Fig. 41).*

c. *When distance "D" is 13 mm (1/2") lower at front than rear, tighten nuts "E".*

d. *To lower rear of mower, loosen nut "F" on both rear suspension arms an EQUAL NUMBER OF TURNS (Fig. 37).*

e. *When distance "D" is 13 mm (1/2") lower at front than rear, retighten nuts "E".*

NOTE: WHEN ADJUSTING REAR SUSPENSION TRUNNIONS, ALWAYS ADJUST BOTH EQUALLY SO MOWER WILL STAY LEVEL.

***Mower Drive Belt Removal***

NOTE: MOWER BELT INSTALLATION DECAL LOCATED ON MOWER HOUSING.

**REPLACE ONLY WITH THE BELTS SPECIFIED IN THIS MANUAL.**

a. *Place attachment clutch switch in "Disengaged" position (Fig. 38).*

b. *Turn height adjustment knob to its lowest position. Move attachment lift lever (Fig. 38) forward to lower mower to its lowest position.*

c. *Roll belt off engine pulley (Fig. 39).*

d. *Pull belt off both mower pulley and idler pulleys (Fig. 40).*

e. *To replace mower drive belt, reverse above procedure.*

NOTE: MAKE SURE DRIVE BELT IS ENGAGED IN ALL PULLEYS.



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### 7. Mower Removal

a. *Remove mower drive belt. (See "MOWER DRIVE BELT REMOVAL," page 22, through step 3.)*

b. *Pull belt off engine pulley (Fig. 39).*

c. *Pull retainer springs out of rear suspension trunnions. Remove rear suspension trunnions from lift brackets (Fig. 41)*

d. *Pull retainer spring out of rear hinge pin. Remove rear hinge pin (Fig. 41).*

e. *Pull retainer spring out of front hinge pin. Remove front hinge pin (Fig. 41) and parallel link.*

f. *Use lift lever to raise suspension arms. Slide mower out from under tractor.*

**BEFORE DRIVING YOUR TRACTOR, INSTALL MOWER OR REMOVE PARALLEL LINK (FIG. 41).**

NOTE: IF AN ATTACHMENT OTHER THAN THE MOWER DECK IS TO BE MOUNTED ON THE TRACTOR, THE L.H. AND R.H. SUSPENSION ARMS (FIG. 41) SHOULD BE REMOVED.

### 8. Mower Blade Drive Belt Replacement

a. *Remove mower drive belt. (See page 22.)*

b. *Remove mower from tractor. (See "MOWER REMOVAL," above.)*

c. *Pull belt towards rear of mower at tensioning pulley (Fig 42). Place a block between tension bracket and mower lift bracket. Roll belt off tensioning pulley.*

d. *Roll belt off all other pulleys.*

e. *Slide belt from under spring.*

f. *To install belt, reverse above procedure. Make sure belt is engaged in all pulleys.*

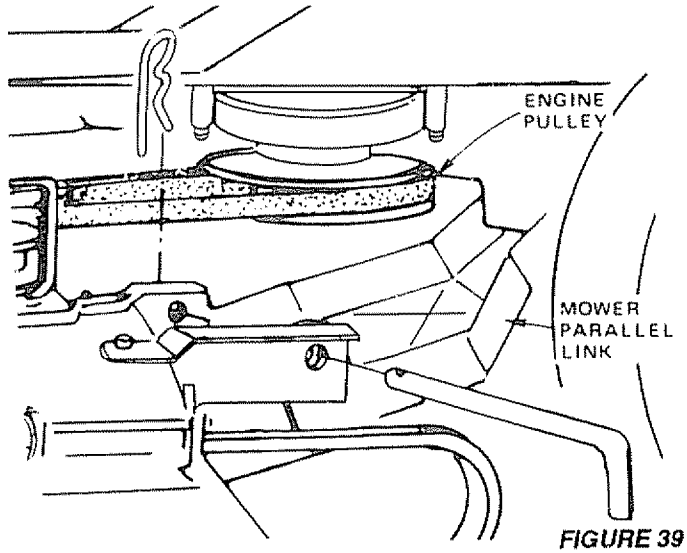



FIGURE 39

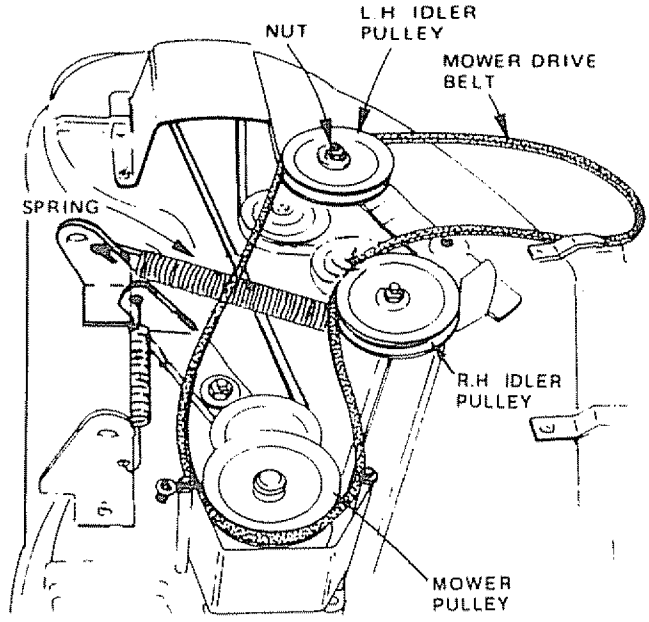



FIGURE 40

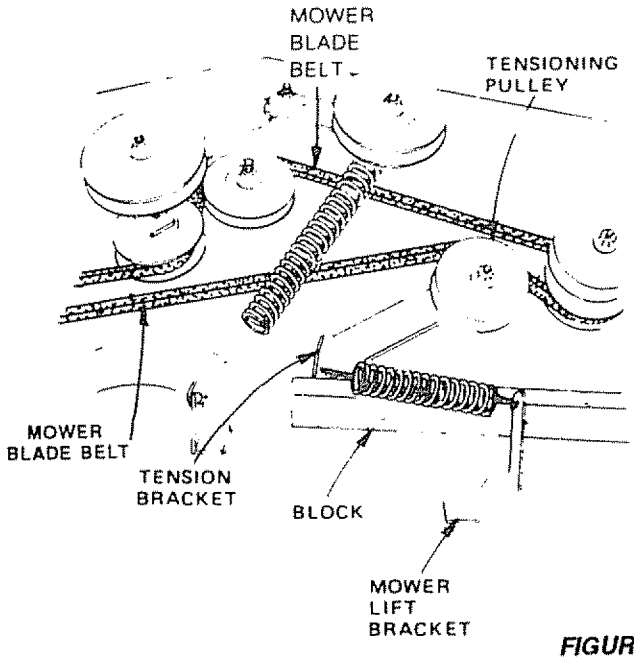



FIGURE 42

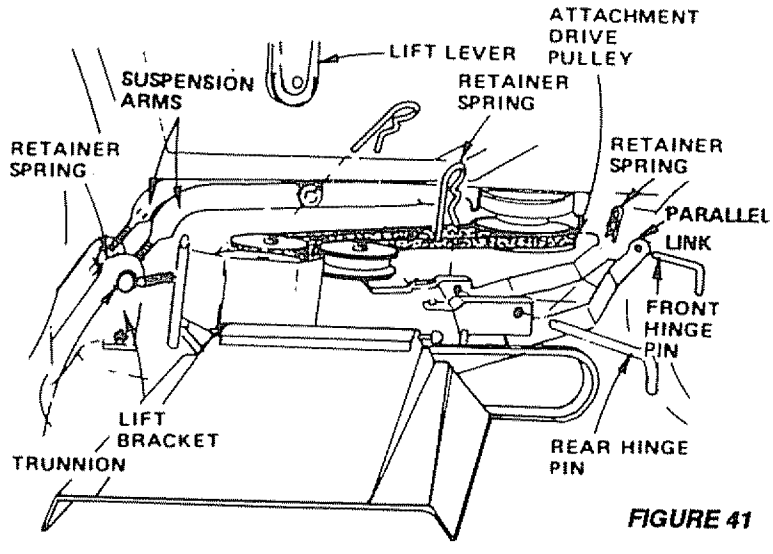



FIGURE 41

# REPAIR & ADJUSTMENTS

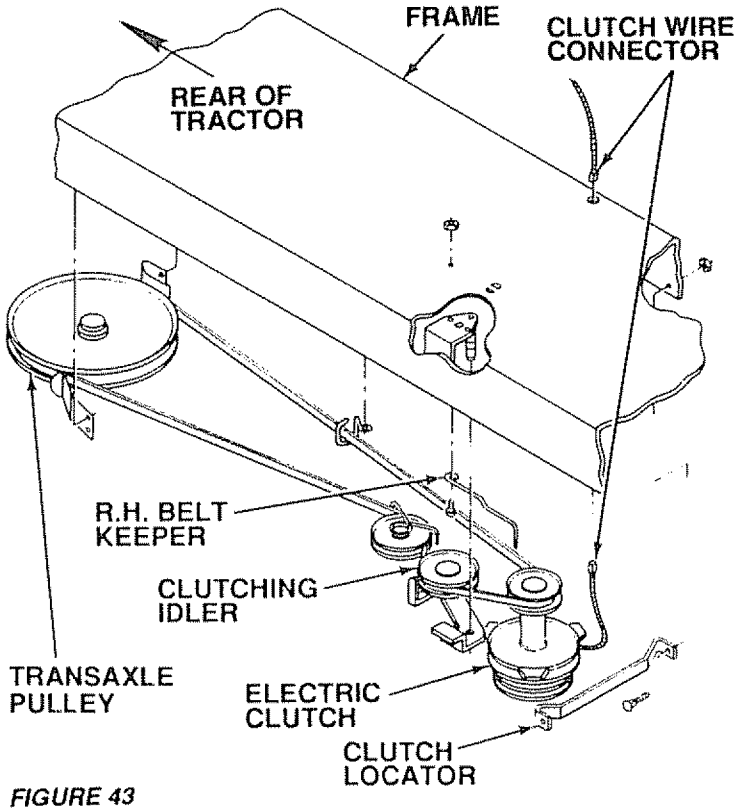



*FIGURE 43*

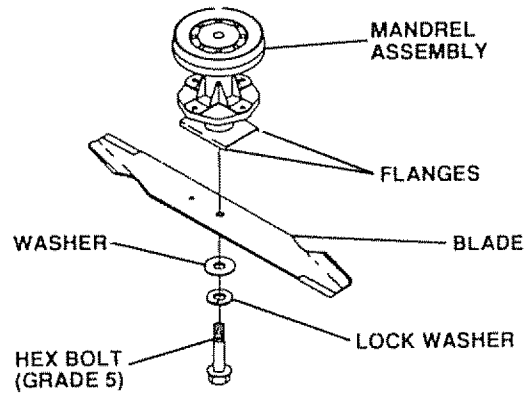



*FIGURE 44*

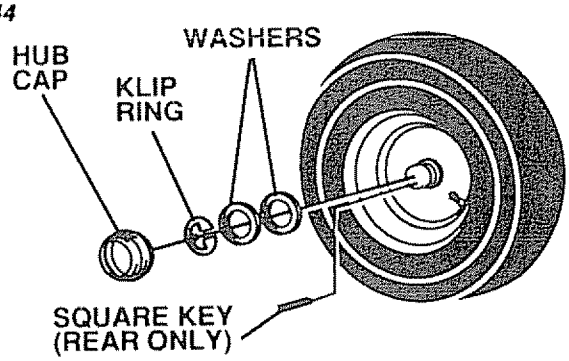
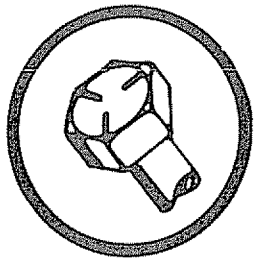



*FIGURE 45*



A GRADE 5 HEAT TREATED BOLT CAN BE IDENTIFIED BY THREE LINES ON THE BOLT HEAD AS SHOWN AT LEFT

### *9 Motion Drive Belt Replacement*

NOTE: BELT INSTALLATION DECAL IS LOCATED UNDER LEFT FOOTREST.

*a. Remove mower (see "MOWER REMOVAL" page 23).*

*b. Using a 1/2" wrench, remove the clutch locator (Fig. 43).*

*c. Using a 9/16" wrench, loosen the right hand belt keeper (Fig. 43).*

*d. Disconnect clutch wire connector. Push connector through frame (Fig. 43).*

*e. Pull belt off clutching idler and raise to top side of pulley.*

*f. Release parking brake. Push belt over and away from clutching idler.*

*g. Pull belt slack toward rear of tractor. Remove belt from transmission pulley by deflecting keepers to force belt up and out of pulley. (Use belt to push keepers away from pulley.) (Fig. 43.)*

*h. Work belt around remaining pulleys and keepers, working toward transaxle pulley.*

*j. Pull belt forward off transaxle pulley and down over electric clutch.*

*h. Reinstall in reverse of above procedure.*

*Make sure right hand belt keeper is positioned correctly between locator tabs and electric clutch connection is secure.*

### *10. Blade Replacement*

*Raise mower to highest position to permit access to blades or remove mower.*

*a. Remove bolt, lockwasher and washer (Fig. 44) (turn counterclockwise)(↶).*

*b. Remove and discard old blade.*

*c. Clean top and bottom of mower housing.*

*d. Place new blade between flanges, (Install with sharp edge down), and secure with washer, lockwasher and bolt previously removed.*

### *11. Tire Care*

*a. Maintain tire pressure in front at 14 PSI (1Kg/cm²) and rear tires at 10 PSI (0.7 Kg/cm²).*

*b. Keep tires free of gasoline, oil, or insect control chemicals which can harm rubber.*

*c. Avoid stumps, stones, deep ruts, sharp objects and other hazards that may cause tire damage.*

*d. Removing wheel for tire repair (Fig. 45).*

*1. Block up axle securely.*

*2. Remove hub cap, klip ring and washer to allow wheel removal (rear wheel contains a square key – Do Not Lose).*

*3. Repair tire and reassemble. Align slots in rear wheel hub and axle. Insert square key. Replace washer and snap klip ring securely in axle groove. Replace hub cap.*

NOTE: USE GREASE FITTINGS TO LUBRICATE FRONT WHEELS WITH GENERAL PURPOSE GREASE. APPLY AN ANTI-SEIZE OR GOOD GENERAL PURPOSE GREASE TO LUBRICATE REAR AXLES.

**ALWAYS USE GRADE 5 HEAT TREATED BOLTS TO ATTACH BLADES. DO NOT USE PLATED BOLTS. CHECK BOLTS IN BLADES OCCASIONALLY TO MAKE SURE BOLTS ARE TIGHT. TORQUE BOLTS TO 41-47 N-m (30-35 FT.-LBS.).**



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WHEN MOUNTING TIRES, UNLESS BEADS ARE SEATED, OVER INFLATION CAN CAUSE AN EXPLOSION.

### 12. Rear Wheel Replacement

*For rear wheel replacement, follow instructions under "TIRE CARE," page 24*

*Coat axle with grease to prevent corrosion or rust accumulation and eventual seizing of wheel hub to axle shaft.*

WHEN REPLACING WHEELS ON THE TRACTOR THEY MUST BE MOUNTED WITH THE LONG HUB SIDE TOWARD THE CENTER OF THE TRACTOR. INCORRECT INSTALLATION COULD AFFECT LATERAL STABILITY. (SEE FIG. 46)

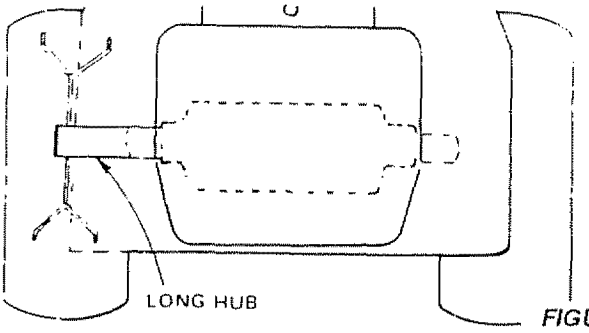


FIGURE 46

### 13. Transaxle Shifter Linkage Positioning and Adjustment

*The transaxle should be in neutral when the gear shift lever is in the neutral (lock gate) position (Fig. 47). The adjustment is preset at the factory; however, if adjustment is needed, proceed as follows:*

- *a Make sure transaxle is in neutral*
- *b Using a 7/16" wrench, loosen two (2) locknuts on tie rod (Fig. 48 - inset)*
- *c Turn center rod (Fig. 48 - inset) until gearshift lever falls into neutral lock gate on fender console (Fig. 47)*
- *d Tighten locknuts securely.*

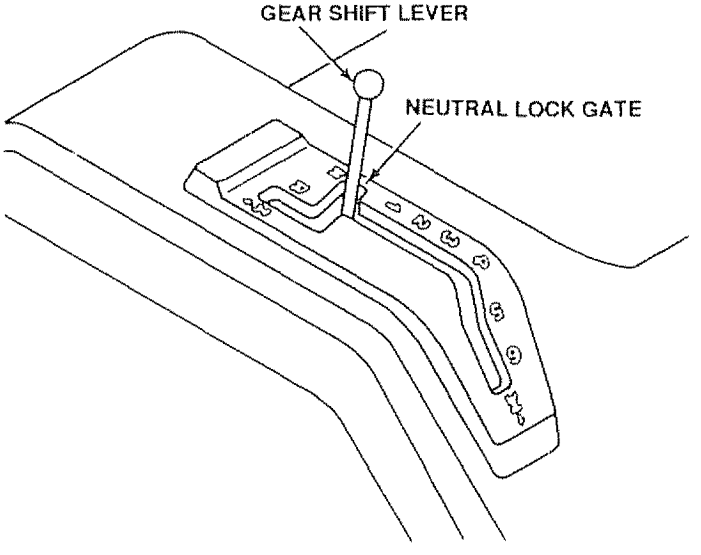


FIGURE 47

### 14 Storage

*Remove mower from tractor for winter storage. When mower is to be stored for a period of time, clean it thoroughly, remove all dirt, grease, leaves, etc., give blades and underside of housing a good coat of grease or rust preventative. Store in a clean dry area.*

- *a Fuel System*

*It is important to prevent gum deposits from forming in essential fuel system parts such as the carburetor, fuel filter, fuel hose, or tank during storage. Also, experience indicates that alcohol blended fuels (called gasohol or using ethanol or methanol) can attract moisture which leads to separation and formation of acids during storage. Acidic gas can damage the fuel system of an Engine while in storage. To avoid engine problems, the fuel system should be emptied before storage of 30 days or longer.*

- *b Engine Oil*

  *Drain (with engine warm) oil and replace with clean engine oil. (see chart on page 15)*

- *c Cylinders*
  1. *Remove spark plugs*
  2. *Pour 29.5 ml (one ounce) of oil through spark plug hole into cylinder*
  3. *Turn ignition key to "START" position for a few seconds to distribute oil*
  4. *Replace with new spark plugs*

- *d Battery*
  1. *Prior to storage, clean terminals and top of battery*
  2. *Disconnect cable from positive side of battery.*

*After a period of time in storage, battery may require recharging.*

- *e General Cleaning*

  *Clean engine, battery, seat, finish, etc. of all foreign matter*

- *f Store in a clean, dry area*

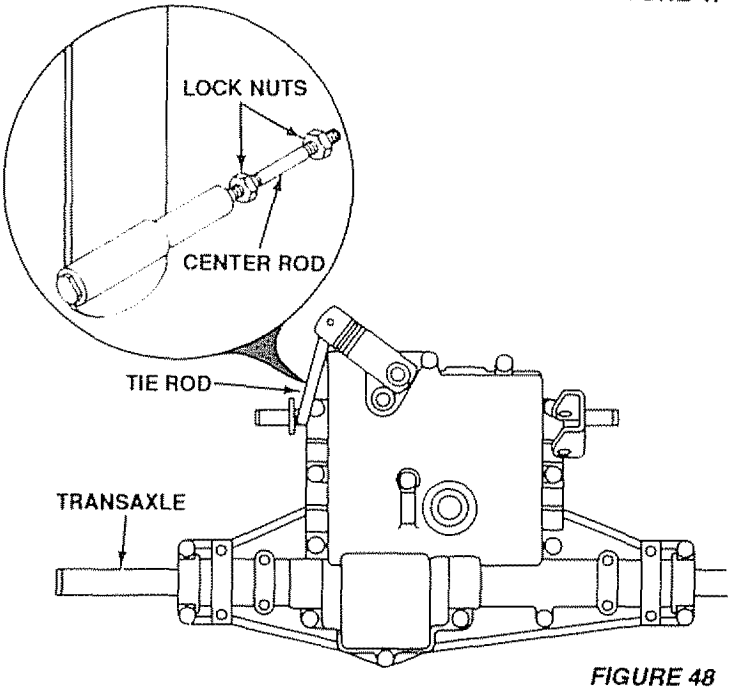


FIGURE 48

# TROUBLESHOOTING

| PROBLEM | CAUSE / REMEDY (SEE INDEX) |
|---|---|
| **WILL NOT START** | *Fill Tank with Gasoline. Check Fuel Line and Carburetor (clean if necessary). Replace Fuel Filter. Use Fresh Fuel*<br>*Recharge or replace Battery*<br>*Check Wiring*<br>*Replace Spark Plug(s) and adjust gap*<br>*Drain and replace oil for proper temperature* |
| **WILL NOT TURN OVER** | *Push Clutch/Brake Pedal into brake position*<br>*Charge or replace Battery*<br>*Move Attachment ClutchSwitchto "DISENGAGED" position*<br>*Replace Ignition Switch*<br>*Replace Interlock Switch(es)*<br>*Replace Solenoid or Starter*<br>*Replace Fuse*<br>*Check all Wire Connections and "Ground" Points*<br>*Reattach Tiller Attachment Wire Loop* |
| **ENGINE CLICKS BUT WON'T START** | *Clean Battery Terminals*<br>*Replace Starter or Solenoid*<br>*Charge or Replace Battery*<br>*Check Wire Connections and "Ground" Points* |
| **HARD TO START** | *Place Throttle Control in "FAST" position and run starter several times to clear out gas*<br>*Remove Air Filter and clean*<br>*Replace Spark Plug(s) and adjust gap*<br>*Recharge or replace Battery*<br>*Check the Wiring*<br>*Drain Fuel Tank and Carburetor. Use Fresh Fuel*<br>*Replace Fuel Filter*<br>*Make necessary adjustments to Carburetor*<br>*Major Engine Overhaul* |
| **ENGINE MISSES OR LACKS POWER** | *Shift to a lower gear or reduce load*<br>*Drain Gas Tank and Carburetor Use Fresh Fuel*<br>*Remove and clean Air Cleaner*<br>*Make necessary carburetor adjustments*<br>*Clean Air Screen*<br>*Add or change oil*<br>*Replace Spark Plug(s) and adjust gap*<br>*Replace Fuel Filter*<br>*Major Engine Overhaul* |
| **ENGINE OVERHEATS** | *Shift to lower gear or reduce load*<br>*Clean Air Screen*<br>*Add or change oil*<br>*Clean Engine Cooling Fins*<br>*Remove and clean Muffler or replace*<br>*Remove and clean Air Filter*<br>*Use fresh fuel and adjust Carburetor* |
| **NO LIGHTS** | *Check Fuse, Switch and Wire Connections Replace Headlight Bulbs*<br>*Replace Switch* |
| **WON'T CHARGE** | *Check Fuse for fault and replace*<br>*Replace Battery*<br>*Replace Diode Assembly*<br>*Replace Alternator* |
| **OPERATOR PRESENCE SYSTEM WILL NOT SHUT DOWN ENGINE WHEN OPERATOR LEAVES SEAT**<br>*NOTE: This tractor is equipped with an operator presence sensing system. Any attempt by the operator to leave the seat with the engine running and the attachment clutch engaged will shut down the engine.* | *Check all Wire Connections*<br>*Check Seat Switch* |

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# TROUBLESHOOTING

| | |
|---|---|
| UNSATISFACTORY MOWER PERFORMANCE<br>UNEVEN DISTRIBUTION OF CLIPPINGS | *Move Throttle Control to "FAST"*<br>*Check air pressure in Tires*<br>*Check front-to-rear and side-to-side Mower adjustment*<br>*Use a slower ground speed*<br>*Replace Mower Blades*<br>*Reinstall Mower Blades with Top of Blade up*<br>*Clean underside of Mower Deck*<br>*Readjust Mower Drive Belt* |
| MOWER BLADES WILL NOT ROTATE | *Correct Clutch Mechanism Interference*<br>*Install new Mower Drive Belt*<br>*Reinstall Mower Drive Belt*<br>*Adjust Mower Drive Belt*<br>*Replace frozen Mandrel*<br>*Replace frozen Idler Pulley* |
| EXCESSIVE MOWER VIBRATION | *Replace bent or unbalanced Blades*<br>*Replace Mandrel Straighten Deck or replace* |
| WIND ROWING STRIPPING OR DROPPING OF GRASS CLIPPINGS | *Set Throttle for maximum engine speed*<br>*Let grass dry out*<br>*Clean underside of Mower Deck*<br>*Readjust Mower front-to-rear and side-to-side*<br>*Replace Blades* |
| UNEVEN CUT OR SCALPING | *Readjust Mower front-to-rear and side-to-side*<br>*Replace Blades*<br>*Replace bent Mandrel(s)* |

## SERVICE RECORD

FILL IN DATES AS YOU COMPLETE REGULAR SERVICE

| | FIRST 2 HOURS | EVERY 5 HOURS | EVERY 25 HOURS | EVERY 50 HOURS | EVERY 100 HOURS | EVERY 200 HOURS | SERVICE DATES | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Change Engine Oil | ✓ | | | ✓ | | | | | | | | | |
| Check Brake Operation | | | ✓ | | | | | | | | | | |
| Check Tire Pressure | | ✓ | | | | | | | | | | | |
| Clean Air Screen | | | | ✓ | | | | | | | | | |
| Clean Air Cleaner | | | | ✓ | | | | | | | | | |
| Lubricate Pivot Points (see page 24) | | | | ✓ | | | | | | | | | |
| Check Battery Level and Recharge | | | | ✓ | | | | | | | | | |
| Clean Battery and Terminals | | | | ✓ | | | | | | | | | |
| Carburetor Adjustment | | | ✓ | | | | | | | | | | |
| V-Belt Adjustment | | | ✓ | | | | | | | | | | |
| Clean Engine Cooling Fins | | | | ✓ | | | | | | | | | |
| Check Muffler | | | | ✓ | | | | | | | | | |
| Replace Air Cleaner Paper Cartridge | | | | | ✓ | | | | | | | | |
| Replace Spark Plug | | | | | ✓ | | | | | | | | |
| Change Engine Oil Filter | | | | ✓ | | | | | | | | | |
| Replace Fuel Filter | | | | | ✓ | | | | | | | | |

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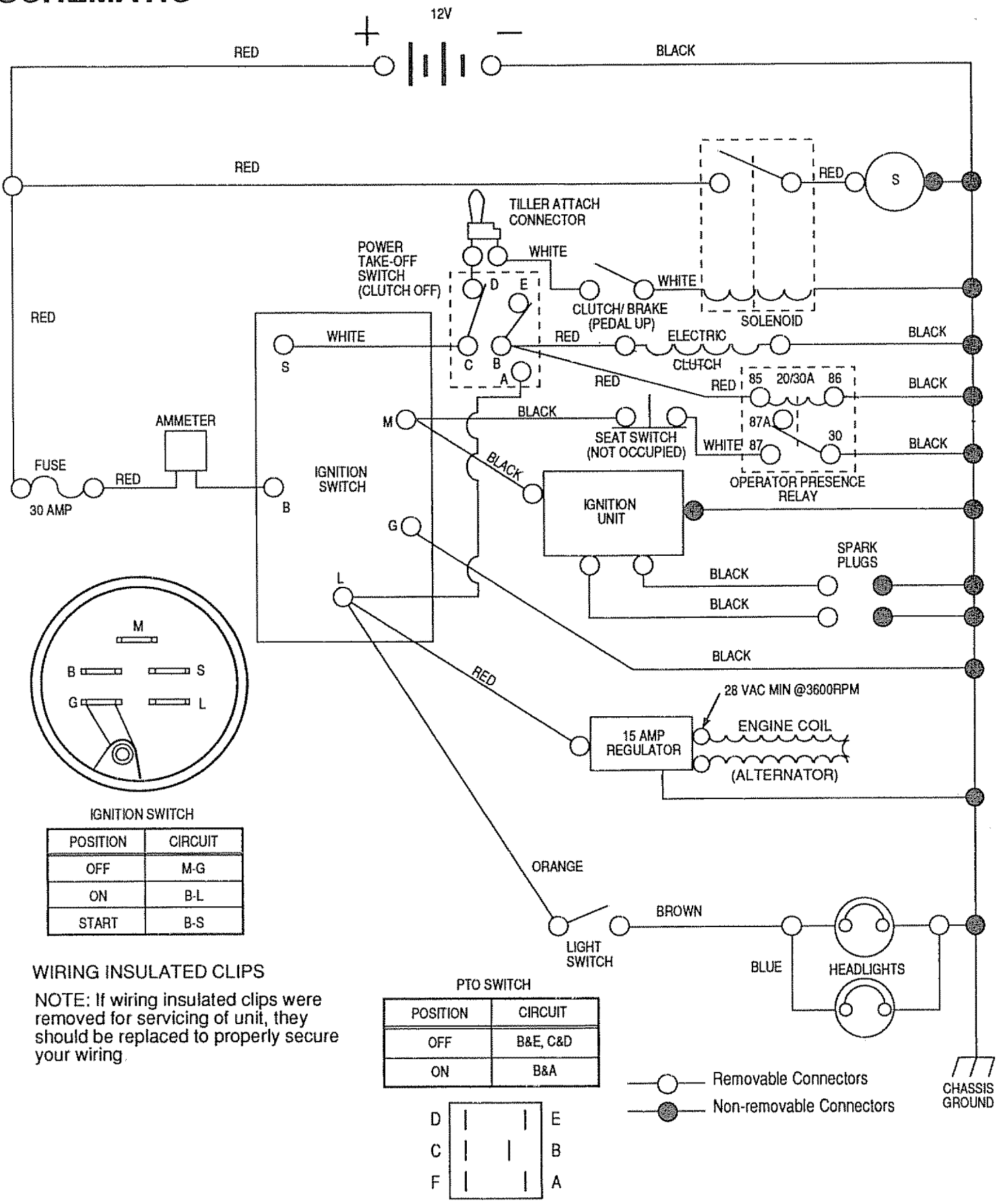
# 20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 AND 917.250040

## SCHEMATIC




IGNITION SWITCH

| POSITION | CIRCUIT |
|---|---|
| OFF | M-G |
| ON | B-L |
| START | B-S |

PTO SWITCH

| POSITION | CIRCUIT |
|---|---|
| OFF | B&E, C&D |
| ON | B&A |

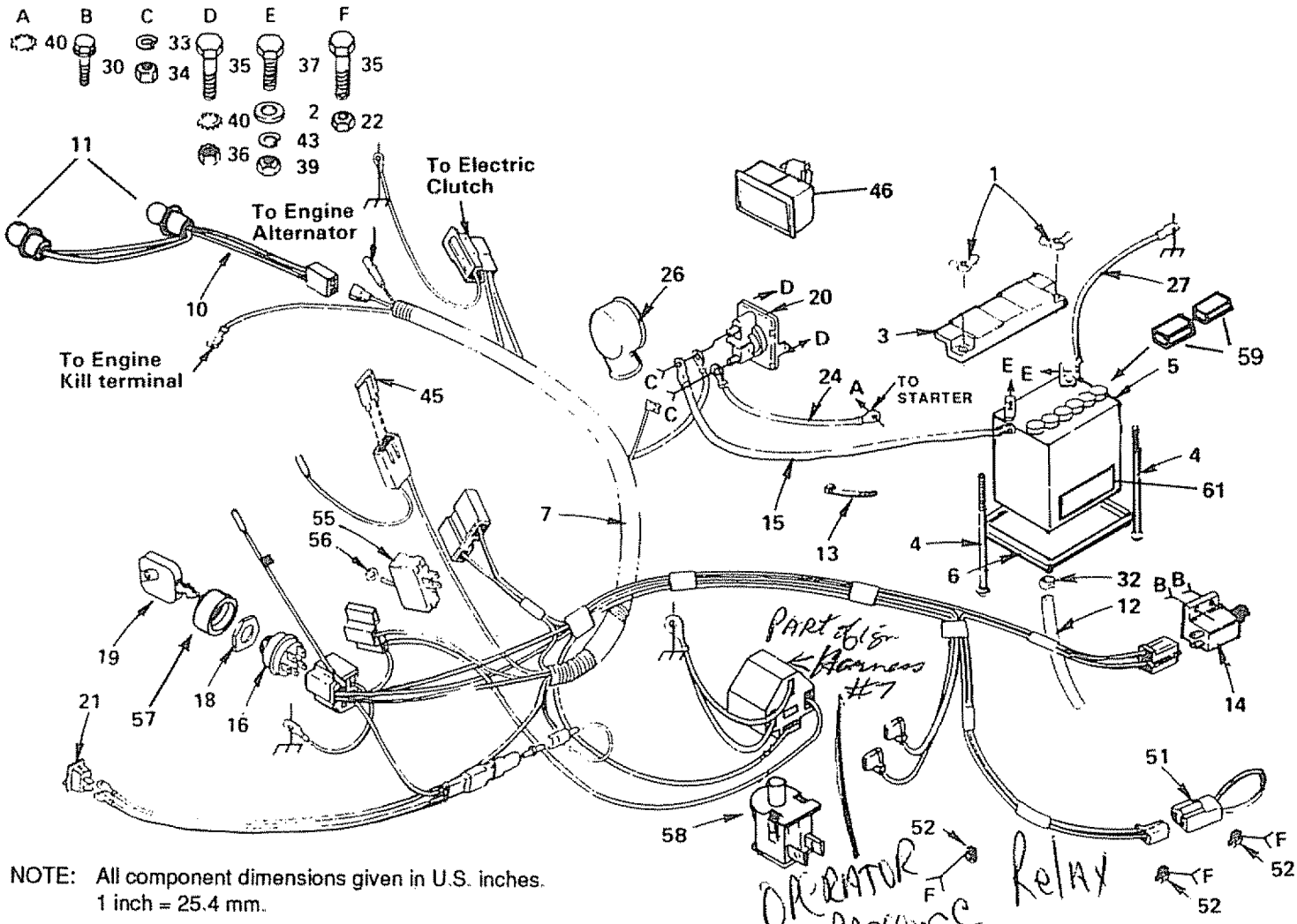
### WIRING INSULATED CLIPS

NOTE: If wiring insulated clips were removed for servicing of unit, they should be replaced to properly secure your wiring.

# REPAIR PARTS

## 20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 AND 917.250040

### ELECTRICAL




NOTE: All component dimensions given in U.S. inches.
1 inch = 25.4 mm.

| KEY NO. | PART NO. | | DESCRIPTION |
|---|---|---|---|
| 1 | 123198X | | Wing Nut 1/4 - 20 |
| 2 | STD551025 | * | Washer 9/32 x 5/8 x 16 Ga. |
| 3 | 102476X | | Guard - Terminal |
| 4 | STD532575 | * | Bolt, Carriage 1/4- 20 x 7- 1/2 |
| 5 | 121537X | | Battery |
| 6 | 7603J | | Battery Tray |
| 7 | 124654X | | Harness - Ignition |
| 10 | 110859X | | Harness - Light Socket |
| 11 | 4152J | | Bulb - Light |
| 12 | 100541K | | Tube - Battery Tray |
| 13 | 7192J | | Cable Tie |
| 14 | 104445X | | Switch - Interlock - Clutch |
| 15 | 4206J | | Cable - Battery (Battery to Solenoid) |
| 16 | 4406R | | Ignition Switch |
| 18 | 109788X | | Nut - Ignition |
| 19 | 109310X | | Key |
| 20 | 109081X | | Solenoid |
| 21 | 110712X | | Switch - Light |
| 22 | 73680400 | | Nut - Hex 1/4 - 20 |
| 24 | 4799J | | Cable - Battery (Solenoid to Starter) |
| 26 | 719J | | Terminal Cover (For Solenoid) |
| 27 | 4207J | | Cable - Battery IBattery to Ground) |

| KEY NO. | PART NO. | | DESCRIPTION |
|---|---|---|---|
| 30 | STD601005 | * | Screw - Tap. Hex Hd. No. 10 - 24 UNC x 1/2 Type T |
| 32 | 109596X | | Clamp - Hose |
| 33 | STD551125 | * | Lockwasher 1/4 |
| 34 | 73350400 | * | Nut - Hex Jam 1/4 - 20 |
| 35 | 74780408 | | Bolt-Hex 1/4 - 20 x 1/2 Gr. 5 |
| 36 | STD541425 | * | Nut-Keps, Hex 1/4 - 20 |
| 37 | 74760412 | | Bolt-Hex 1/4 - 20 x 3/4 |
| 39 | STD541025 | * | Nut-Hex 1/4 - 20 |
| 40 | 11050400 | | Washer - Lock 1/4 Ext. Tooth |
| 43 | STD551125 | * | Lockwasher 1/4 |
| 45 | 108824X | | Fuse - 30 Amp. |
| 46 | 121433X | | Ammeter |
| 51 | 102501X | | Loop - Wire |
| 52 | 235R | | Clip - Insulated |
| 55 | 4021J | | Switch PTO |
| 56 | 4022J | | Nut-Hex |
| 57 | 109787X | | Bezel, Ignition |
| 58 | 121305X | | Switch Seat |
| 59 | 121264X | | Cap Battery |
| 61 | 120960X | | Decal, Battery |
| - - - | 125895X | | Owner's Manual (English) |
| - - - | 101539X | | Sheet, Instruction - Tractor 15° Slope (English) |

•STANDARD HARDWARE--PURCHASE LOCALLY



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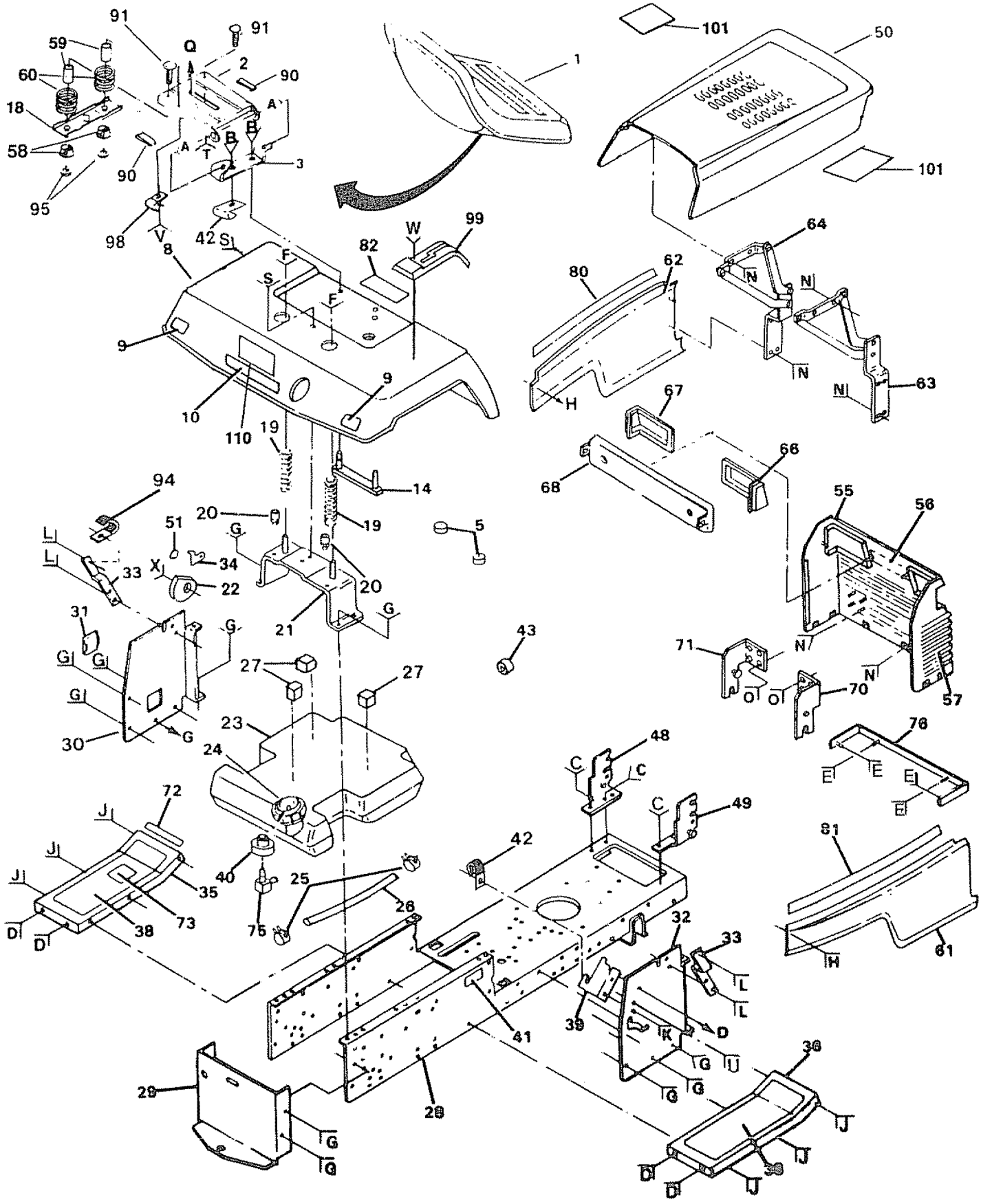
# REPAIR PARTS

## 20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 AND 917.250040

CHASSIS AND ENCLOSURES

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# REPAIR PARTS

## 20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 AND 917.250040

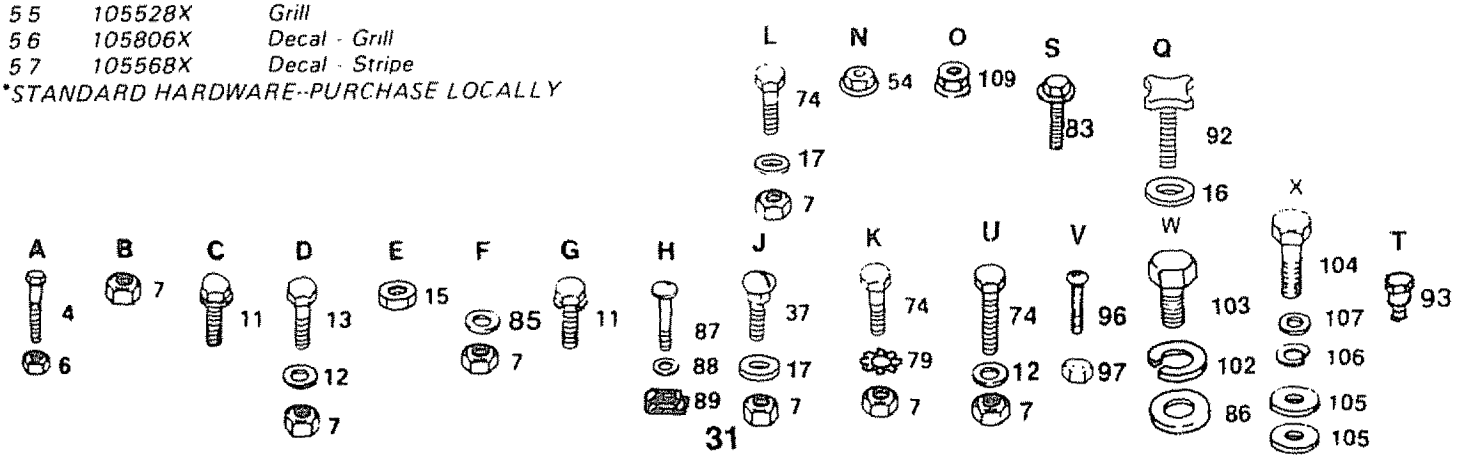
### CHASSIS AND ENCLOSURES

NOTE: All component dimensions given in U.S. inches - 1 inch = 25.4 mm

| KEY NO. | PART NO. | DESCRIPTION |
|---|---|---|
| 1 | 120066X | Seat |
| 2 | 124294X | Pan - Seat |
| 3 | 105513X | Bracket - Pivot - Seat |
| 4 | 105529X | Bolt - Shoulder 5/16 - 18 |
| 5 | 124238X | Cap - Spring |
| 6 | 73680500 | Nut - Lock 5/16 - 18 |
| 7 | 73680600 | Nut - Lock 3/8 - 16 |
| 8 | 123784X | Fender |
| 9 | 106202X | Reflector - Rear |
| 10 | 105801X | Decal |
| 11 | 17490612 | Screw, Hex Washer Thd Roll 3/8-16 x 3/4 |
| 12 | 19131312 | Washer 13/32 x 13/16 x 12 Ga |
| 13 | STD523707 | *Bolt, Hex. 3/8-16 x 3/4 |
| 14 | 105511X | Strap - Fender |
| 15 | 73220400 | Nut, Fin. Hex 1/4 - 20 |
| 16 | 19171912 | Washer 17/32 x 1-3/16 x 12 Ga. |
| 17 | 120684X | Washer, Neoprene |
| 18 | 121246X | Bracket, Switch - Seat |
| 19 | 124181X | Compression - Spring R.H. |
| 20 | 105531X | Nut, Push |
| 21 | 105509X | Bracket - Fender |
| 22 | 123934X | Scale, Height Indicator |
| 23 | 106020X | Tank - Fuel |
| 24 | 123549X | Cap - Fuel |
| 25 | 123487X | Clamp - Hose |
| 26 | 8542R | Line - Fuel |
| 27 | 106082X | Pad - Spacer |
| 28 | 121277X | Chassis Assembly |
| 29 | 123785X | Drawbar |
| 30 | 124118X | Panel - Dash - L.H. |
| 31 | 121794X | Cover, Access |
| 32 | 110828X | Panel - Dash - R.H. |
| 33 | 105525X | Bracket - Support - Dash |
| 34 | 123933X | Pointer, Height Indicator |
| 35 | 105465X | Footrest - L.H. |
| 36 | 105464X | Footrest - R.H. |
| 37 | STD533707 | *Bolt, Carr. 3/8-16 x 3/4 |
| 38 | 105466X | Pad, Footrest |
| 39 | 110923X | Bracket - Clutch - Mower |
| 40 | 3645J | Bushing |
| 41 | 105567X | Decal - 6 Speed 44" |
| 42 | 2751R | Clip - Insulated |
| 43 | 110436X | Grommet, Split |
| 48 | 109015X | Bracket - Pivot - L.H. |
| 49 | 109016X | Bracket - Pivot - R.H. |
| 50 | 106013X017 | Hood |
| 51 | 123935X | Plug, Hole |
| 52 | 73680400 | Nut - Crownlock 1/4-20 |
| 54 | 108067X | Pal - Nut |
| 55 | 105528X | Grill |
| 56 | 105806X | Decal - Grill |
| 57 | 105568X | Decal - Stripe |

*STANDARD HARDWARE--PURCHASE LOCALLY

| KEY NO. | PART NO. | DESCRIPTION |
|---|---|---|
| 58 | 121248X | Bushing, Snap |
| 59 | 121249X | Spacer, Split |
| 60 | 121250X | Spring, Compression |
| 61 | 108403X | Panel - Side - R.H. |
| 62 | 108410X | Panel - Side - L.H. |
| 63 | 126432X | Hinge - R.H. |
| 64 | 126431X | Hinge - L.H. |
| 66 | 106003X | Lens - R.H. |
| 67 | 106004X | Lens - L.H. |
| 68 | 110897X | Bezel - Headlight |
| 70 | 108512X | Bracket - Pivot - R.H. |
| 71 | 108513X | Bracket - Pivot - L.H. |
| 72 | 4900J | Decal - Clutch Brake |
| 73 | 109199X | Decal - Drive Belt |
| 74 | 74760612 | Bolt - Hex 3/8-16 x 3/4 |
| 75 | 8710J | Stem - Tank Fuel |
| 76 | 110350X | Strap Assembly - Grill |
| 79 | 11050600 | Washer - Lock Ext. Tooth 3/8 |
| 80 | 106813X | Decal - Stripe Side Panel, L.H. |
| 81 | 106814X | Decal - Stripe Side Panel, R.H. |
| 82 | 106974X | Decal - Caution |
| 83 | 17490608 | Bolt, Hex Washer Thread Rolling 3/8 - 16 X 1/2 |
| 85 | 19131614 | Washer 13/32 x 1 x 14 Ga |
| 86 | 19060718 | Washer 3/16 x 7/16 x 18 Ga. |
| 87 | 106909X | Screw - Special |
| 88 | 106910X | Washer |
| 89 | 108402X | U-Clip |
| 90 | 121251X | Strip, Foam |
| 91 | 72170410 | Bolt, Carr. 1/4 - 20 x 1-1/4 |
| 92 | 120068X | Knob, Seat |
| 93 | 121144X | Shoulder Bolt |
| 94 | 5320R | Clip - Insulated |
| 95 | 123976X | Nut, Hex Large Flange |
| 96 | 74641008 | Screw - Sltd Pan Head #10 - 24 x 1/4 |
| 97 | 73951000 | Nut, Keps #10 - 24 |
| 98 | 4171R | Clip, Insulated |
| 99 | 123825X | Console, Shifter |
| 101 | 126313X | Decal, Hood |
| 102 | 10100800 | Washer, Lock |
| 103 | 74640806 | Screw #8 x 3/8 |
| 104 | 74780516 | Bolt, Hex 5/16 - 18 UNC x 1 |
| 105 | 19112410 | Washer 11/32 x 1 1/2 x 10 Ga. |
| 106 | 10040500 | Washer, Lock |
| 107 | 120529X | Washer, Nylon |
| 108 | 9151R | Grommet |
| 109 | 120579X | Pal Nut |
| 110 | 750211 | Decal, U.S.A. |



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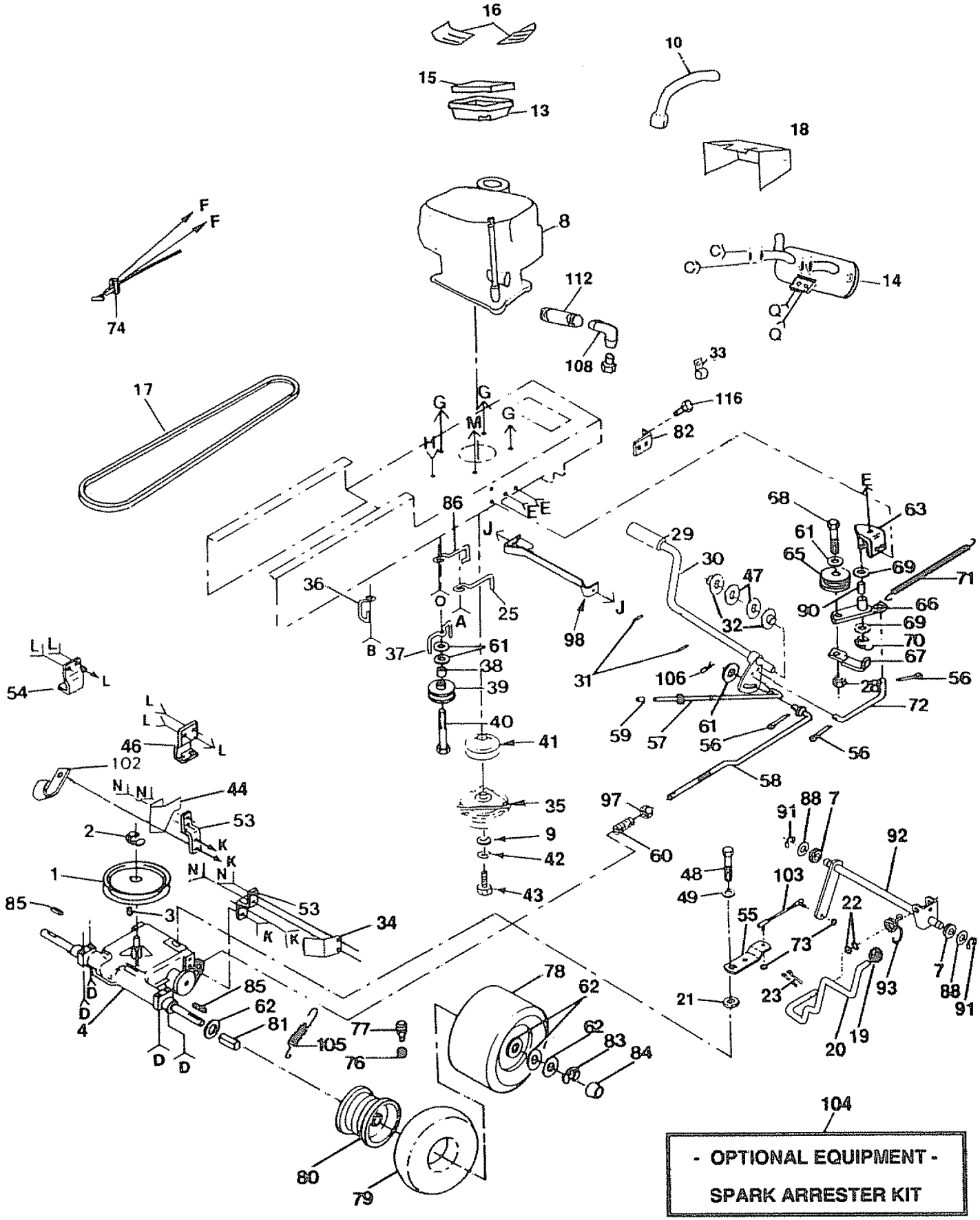
# REPAIR PARTS

## 20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 AND 917.250040

DRIVE



# REPAIR PARTS

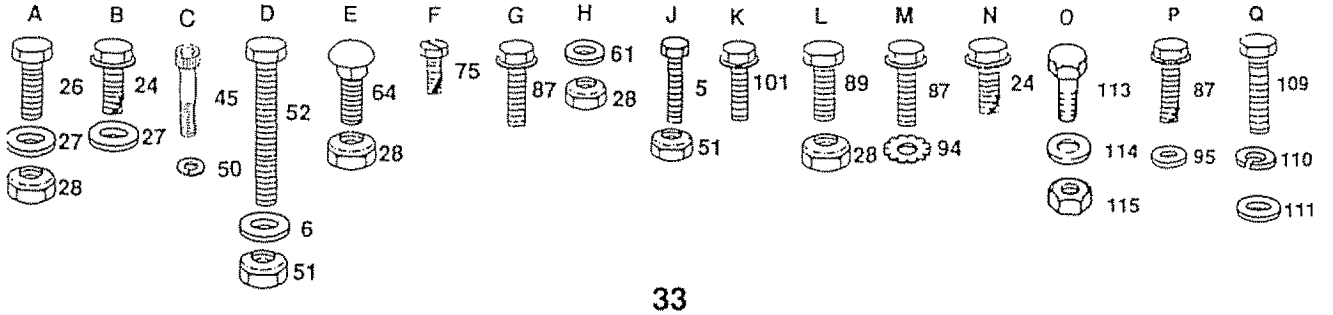
## 20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 AND 917.250040

### DRIVE

| KEY NO. | PART NO. | | DESCRIPTION |
|---|---|---|---|
| 1 | 121327X | | Pulley, Transaxle (Driven) |
| 2 | 12000004 | | Ring, Retainer |
| 3 | 2228M | | Key, Woodruff #9 |
| 4 | 123797X | | Transaxle, 6-Speed, Peerless Model No. 143.820- 016 |
| 5 | STD533107 | * | Bolt,Hex 5/16 - 18 x 3/4 |
| 6 | 19111214 | | Washer 11/32 x 3/4 x 14 Ga |
| 7 | 71208 | | Bushing, Rod, Steering |
| 8 | 125605X | | Engine, 20 HP Kohler Model No MV20S, Spec. No. 57517 |
| 9 | 126197X | | Washer 15/32 x 1- 3/4 x 1/4 |
| 10 | 125893X | | Tube Assembly, Exhaust |
| 13 | 125762X | | Duct, Air, Kohler |
| 14 | 125890X | | Muffler |
| 15 | 123537X | | Foam, Strip |
| 16 | 120511X | | Bracket,Air Duct |
| 17 | 123796X | | V-Belt, Drive |
| 18 | 125891X | | Shield, Heat Kohler Vertical Twin |
| 19 | 106933X | | Knob |
| 20 | 123781X | | Rod, Shifter |
| 21 | 105701X | | Washer, Shift Plate |
| 22 | 19171216 | | Washer 17/32 x 3/4 x 16 Ga |
| 23 | STD561210 | * | Pin, Cotter 1/8 x 1 |
| 24 | 17490612 | | Screw, Hex Washer Hd Thd Roll 3/8 - 16 x 3/4 |
| 25 | 105730X | | Keeper, Belt, Engine |
| 26 | STD523710 | * | Bolt,Hex 3/8 - 16 x1 |
| 27 | 19131312 | | Washer 13/32 x 13/16 x12Ga |
| 28 | STD541437 | * | Locknut 3/8 -16 |
| 29 | 8883R | | Cover, Foot Pedal |
| 30 | 122424X | | Shaft, Foot Pedal |
| 31 | 1572H | | Pin,Roll 3/16 x 1 |
| 32 | 120813X | | Bearing, Nylon |
| 33 | 122758X | | Clamp, Muffler |
| 34 | 123792X | | Keeper, Belt, Transaxle, R.H. |
| 35 | 124648X | | Clutch, Electric |
| 36 | 123788X | | Retainer, Belt |
| 37 | 109070X | | Keeper, Belt |
| 38 | 4470J | | Spacer |
| 39 | 123674X | | Idler, Flat |
| 40 | STD523727 | * | Bolt, Hex 3/8 - 16 x 2 - 3/4 |
| 41 | 124647X | | Pulley, Engine |
| 42 | STD551143 | * | Washer, Lock 7/16 |
| 43 | 74610764 | | Bolt, Hex 7/16 - 20 x 4 |
| 44 | 123791X | | Keeper, Belt, Transaxle, L.H. |
| 45 | 74570512 | | Screw, Hex Socket 5/16 - 16 X 12 Ga. |
| 46 | 123776X | | Bracket Transaxle, R H |
| 47 | 19211616 | | Washer 21/32 x 1 x 16 Ga. |
| 48 | 71040412 | | Bolt, Hex 1/4 - 28 x 3/4 |
| 49 | STD551025 | * | Washer 9/32 x 3/4 x 16 Ga. |
| 50 | STD551131 | | Washer, Lock Hvy. Helical Spring |
| 51 | STD541431 | * | Locknut 5/16 -18 |
| 52 | 74780544 | * | Bolt, Hex 5/16 -18 x 2 - 3/4 |
| 53 | 123787X | | Strap, Torque |
| 54 | 123780X | | Bracket, Transaxle, L H |
| 55 | 123794X | | Shift Arm |
| 56 | STD561210 | * | Pin, Cotter 1/8 x 3/4 |
| 57 | 125637X | | Rod, Brake, Park |
| 58 | 123786X | | Rod, Brake |
| 59 | 124236X | | Cap, Plunger |
| 60 | 106888X | | Spring, Rod, Brake |
| 61 | STD551037 | * | Washer 13/32 x 13/16 x 16 Ga. |
| 62 | 123800X | | Washer 1-1/32 x 1 - 5/8 x 16 Ga. |
| 63 | 123102X | | Bracket, Clutch |
| 64 | STD533707 | * | Bolt, Carriage 3/8 - 16 x 3/4 |
| 65 | 123766X | | Pulley, Idler |
| 66 | 123789X | | Arm, Idler |
| 67 | 123205X | | Retainer, Belt |
| 68 | STD523715 | * | Bolt, Hex 3/8 -16 x 1-1/2 |
| 69 | 110812X | | Washer, Hardened |
| 70 | 12000039 | | Ring, Clip |
| 71 | 105709X | | Spring, Return Clutch |
| 72 | 105710X | | Link, Clutch |
| 73 | 73530400 | | Nut 1/4 - 28 |
| 74 | 125726X | | Control, Throttle |
| 75 | 17720410 | | Screw, Hex, Thread Cutting 1/4 - 20 x 5/8 |
| 76 | 59192 | | Cap, Valve |
| 77 | 65139 | | Stem, Valve |
| 78 | 124106X | | Tire, Rear |
| 79 | 7154J | | Tube (Not furnished with Tractor) |
| 80 | 124074X | | Rim |
| 81 | 108097X | | Spacer, Split |
| 82 | 108236X | | Bracket, Switch |
| 83 | 12000053 | | E-Ring |
| 84 | 104757X | | Cap Hub, Rear |
| 85 | 9396E | | Key Square 1/4 x 2 |
| 86 | 121218X | | Keeper, Belt, Engine |
| 87 | 125991X | | *Screw, Self Tapping Rolling 3/8 - 16 x 1- 1/2 |
| 88 | 19212016 | | Washer 21/32 x 1 - 1/4 x 16 Ga |
| 89 | STD523707 | * | Bolt Hex 3/8 - 16 x 3/4 |
| 90 | 105706X | | Bearing |
| 91 | 12000008 | | Ring, Klip |
| 92 | 123772X | | Shaft Assembly, Shifter |
| 93 | 123782X | | Spring, Torsion |
| 94 | STD551237 | * | Washer, Lock, Ext. Tooth 3/8 |
| 95 | 19060916 | | Washer |
| 97 | STD541437 | * | Locknut 3/8 - 16 |
| 98 | 109169X | | Retainer Assembly, Clutch |
| 101 | 17490512 | | Screw, Hex, Washer, Thd Rolling 5/16 -18 x 3/4 |
| 102 | 2751R | | Clip, Fuel Line |
| 103 | 123793X | | Rod, Tie |
| 104 | 126621X | | Spark Arrester Kit |
| 105 | 110422X | | Spring, Brake Return |
| 106 | 4497H | | Clip, Hair Pin |
| 108 | 13280336 | | Nipple, Pipe |
| 109 | STD512505 | * | Bolt, Hex 1/4 - 20 x 1/2 |
| 110 | STD551131 | * | Washer, Lock 1/4 |
| 111 | STD551025 | * | Washer 9/32 x 3/4 x 16 Ga. |
| 112 | 13200300 | | Elbow, Pipe STD 90° |
| 113 | 74760516 | | Bolt, Hex 5/16 - 18 UNC x 1 |
| 114 | 19111212 | | Washer 11/32 x 3/4 x 12 Ga |
| 115 | STD541431 | * | Nut, Crownlock 5/16 - 18 |
| 116 | STD601005 | * | Screw, Tap Hex Hd #10 - 24 x 1/2 |

* *STANDARD HARDWARE—PURCHASE LOCALLY*

NOTE: All component dimensions given in U S inches - 1 inch = 25 4 mm

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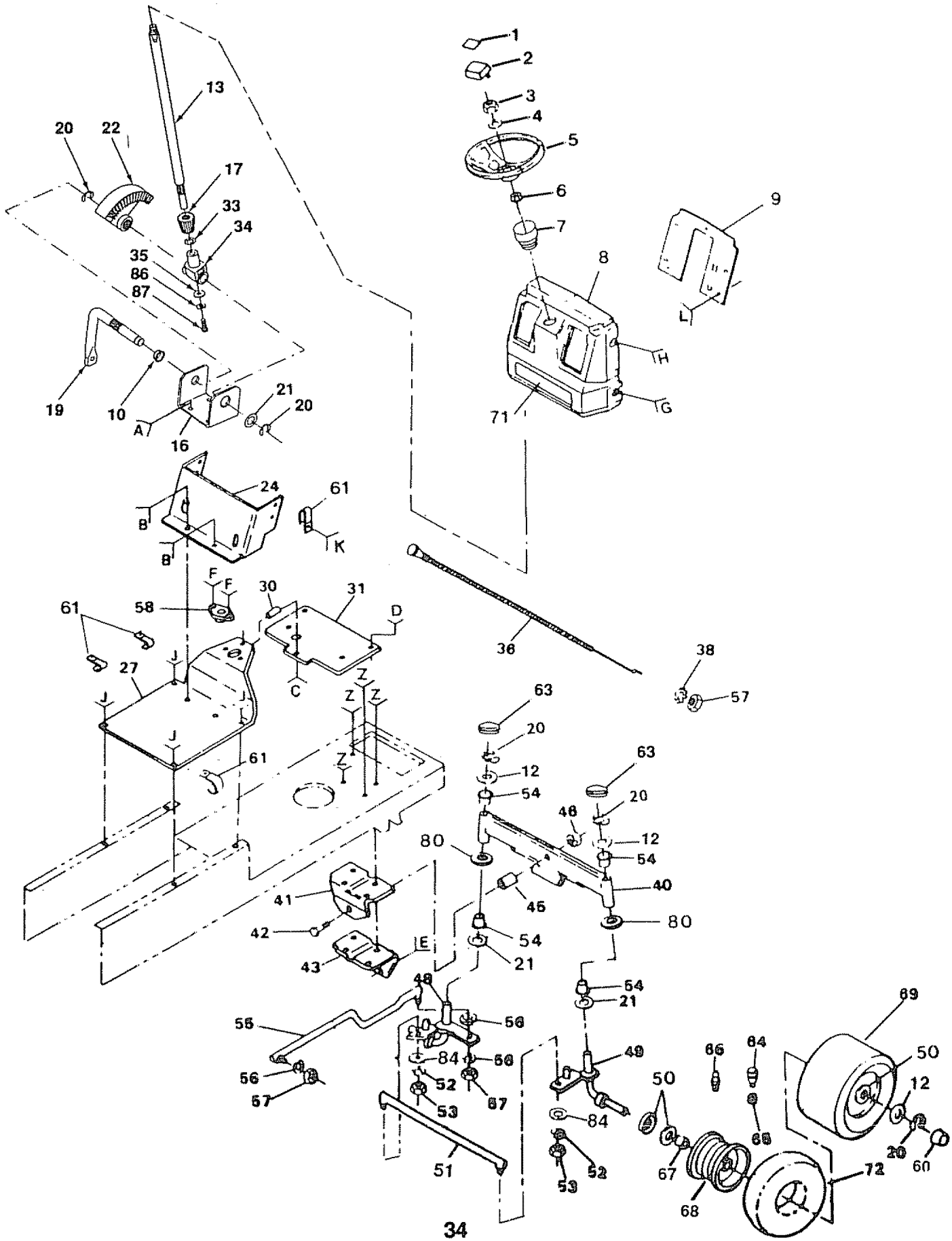
# REPAIR PARTS

## 20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 AND 917.250040

STEERING ASSEMBLY

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# REPAIR PARTS

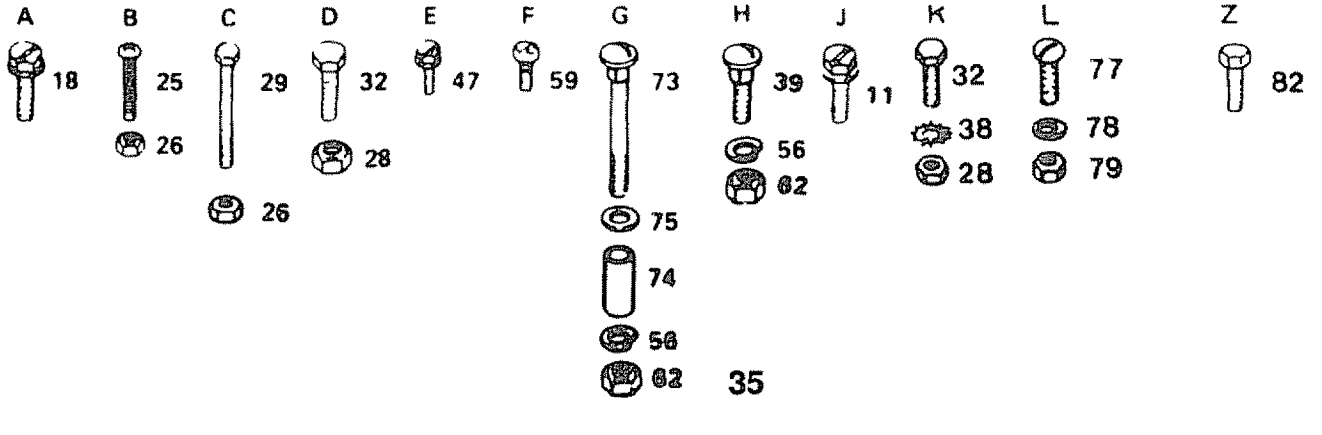
## 20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 AND 917.250040

### STEERING ASSEMBLY

| KEY NO. | PART NO. | DESCRIPTION |
|---|---|---|
| 1 | 105810X | Decal - Cap Steering Wheel |
| 2 | 100710L | Insert, Steering Wheel |
| 3 | 73940800 | *Nut Top Lock 1/2 - 20UNF |
| 4 | 100712K | Washer |
| 5 | 121021X | Wheel, Steering |
| 6 | 100711L | *Adapter - Steering Wheel |
| 7 | 110709X | Column - Steering |
| 8 | 120028X | Dash |
| 9 | 124557X011 | Dash Plate |
| 10 | 109816X | Nyliner, Snap-In |
| 11 | 17490608 | Screw, Hex Washer Thd Rolling 3/8-16 x 1/2 |
| 12 | 121748X | Washer 25/32 x 1-5/8 x 16 Ga |
| 13 | 124041X | Shaft, Steering |
| 16 | 124036X | Bracket, Steering |
| 17 | 124037X | Gear, Pinion |
| 18 | 17490612 | Screw, Hex Washer Thd Rolling 3/8-16 x 3/4 |
| 19 | 124033X | Shaft, Pitman |
| 20 | 12000029 | Klip Ring |
| 21 | 6266H | Bearing, Thrust |
| 22 | 124034X | Gear, Sector |
| 24 | 105518X | Dash, Lower |
| 25 | 74180512 | Screw, Crown Truss Hd 5/16-18 x 3/4 |
| 26 | 73680500 | Nut, Lock 5/16-18 |
| 27 | 123783X012 | Saddle |
| 28 | 73680600 | Nut, Lock 3/8-16 |
| 29 | STD523120 | *Bolt, Hex 5/16-18 x 2 |
| 30 | 121236X | Spacer |
| 31 | 106001X | Support Plate, Battery |
| 32 | STD523707 | *Bolt, Hex 3/8-16 x 3/4 |
| 33 | 57079 | Washer |
| 34 | 124035X | Shaft, Support |
| 35 | 126684X | Washer 5/8 x 1/4 x 16 Ga. |
| 36 | 125727X | Control, Choke |
| 38 | 11050600 | Washer, Lock, Int /Ext Tooth 3/8 |
| 39 | 72110608 | Bolt, Carriage |
| 40 | 108075X | Axle, Front |
| 41 | 105663X | Support, Saddle, Rear |
| 42 | 74761060 | Bolt, Hex 5/8-11 x 3-3/4 |
| 43 | 105664X | Support, Saddle, Front |
| 45 | 110438X | Spacer Bearing Front Axle |
| 46 | 73901000 | Nut, Lock, Flange 5/8-11 |
| 47 | 17490508 | Screw, Hex Washer Thd Rolling 5/16-18 x 1/2 |
| 48 | 105656X | Spindle, L H |
| 49 | 105654X | Spindle, R H |
| 50 | 121749X | Washer 25/32 x 1-1/4 x 16 Ga |
| 51 | 121334X | Rod, Tie |
| 52 | STD551131 | *Washer, Lock 5/16 |
| 53 | STD541131 | *Nut, Hex 5/16-24 |
| 54 | 3366R | Bearing |
| 55 | 124032X | Link, Drag |
| 56 | STD551137 | *Washer, Lock 3/8 |
| 57 | STD541137 | *Nut, Hex 3/8-24 |
| 58 | 1554J | Bushing, Steering |
| 59 | 17431008 | Screw, Hex No 10-16 x 1/2 |
| 60 | 104757X | Cap, Hub, Front |
| 61 | 2751R | Clip, Fuel Line |
| 62 | STD541037 | *Nut, Hex 3/8-16 |
| 63 | 121232X | Spindle, Cap |
| 64 | 59192 | Cap, Valve |
| 65 | 65139 | Stem, Valve |
| 66 | 278H | Fitting, Grease |
| 67 | 9040H | Bearing |
| 68 | 106732X | Rim, 6" Front |
| 69 | 106222X | Tire, Front |
| 71 | 108456X | Decal, Instructions, Operating |
| 72 | 59904 | Tube, Tire, Front |
| 73 | 72110622 | Bolt, Carriage Hex 3/8-16 x 2-3/4 |
| 74 | 121235X | Spacer |
| 75 | 19131416 | Washer 13/32 x 7/8 x 16 Ga |
| 77 | STD512507 | *Screw, Pan Head 1/4-20 x 3/4 |
| 78 | 19091216 | Washer 13/32 x 3/4 x 16 Ga |
| 79 | 73510400 | Nut, Keps 1/4 NC |
| 80 | 19272016 | Washer 27/32 x 1-1/4 x 16 Ga |
| 82 | 122819X | Screw, Special 3/8 - 16 x 3/4 |
| 84 | 19111216 | Washer 11/32 x 3/4 x 16 Ga |
| 86 | STD551125 | Lockwasher 1/4 |
| 87 | 71070410 | Screw, Socket Hex 1/4 x 20 x 5/8 |

*STANDARD HARDWARE -- PURCHASE LOCALLY

NOTE: All component dimensions given in U.S. inches - 1 inch = 25.4 mm



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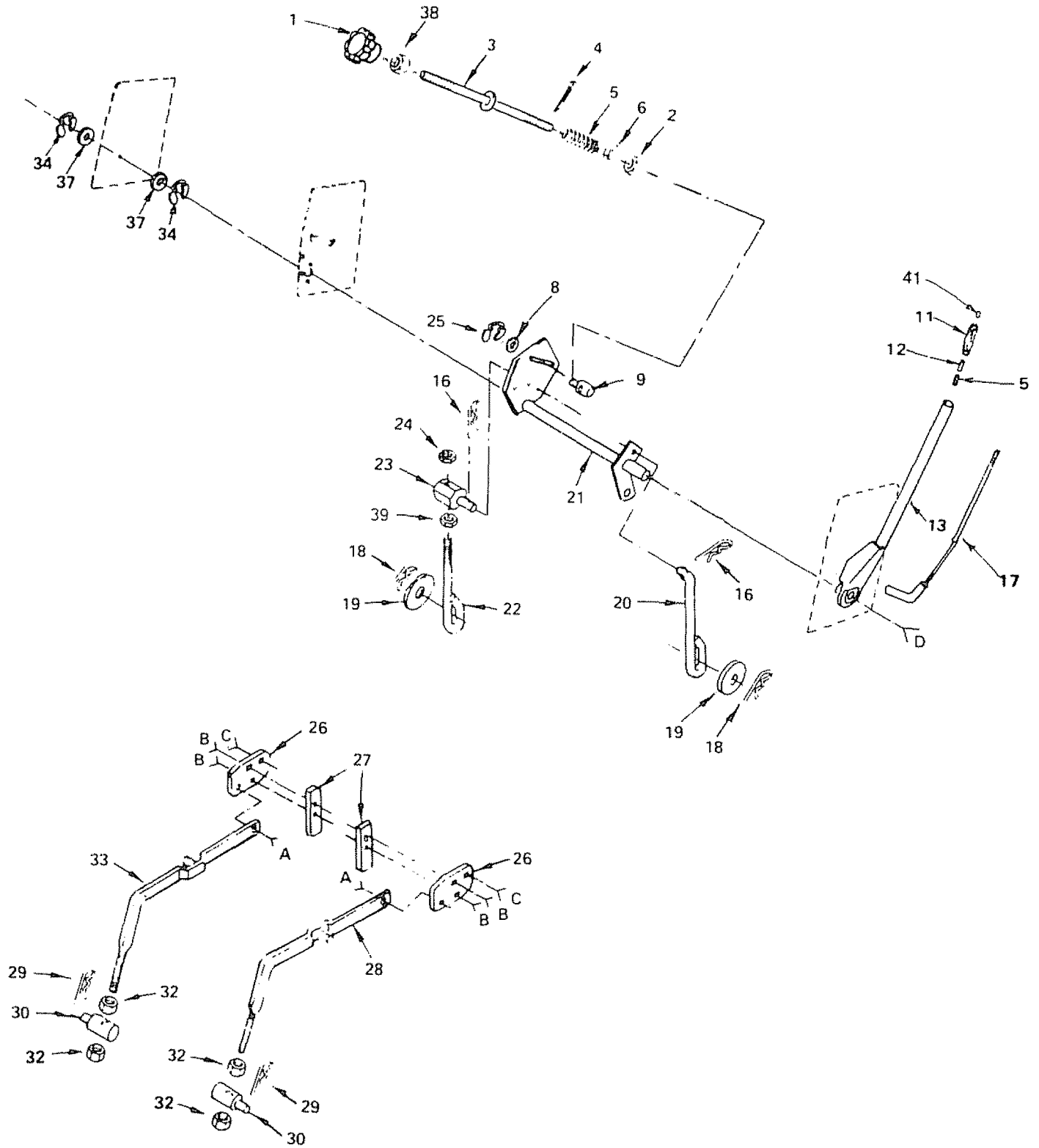
# REPAIR PARTS

## 20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 AND 917.250040

### LIFT ADJUSTMENT

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# REPAIR PARTS

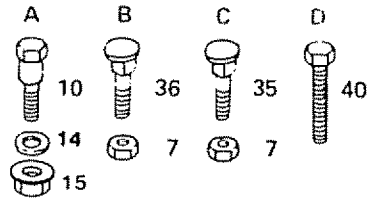
## 20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 AND 917.250040

### LIFT ADJUSTMENT

| KEY NO. | PART NO. | | DESCRIPTION |
|---|---|---|---|
| 1 | 100734K | | Knob, Height Adjustment |
| 2 | 110807X | | Nut Hex Special |
| 3 | 110729X | | Rod - Adjust - Lift |
| 4 | STD560907 | * | Pin - Cotter 3/32 x 1/2 |
| 5 | 2876H | | Spring |
| 6 | 19131016 | | Washer 13/32 x 5/8 x 16 Ga. |
| 7 | STD541437 | * | Nut - Lock 3/8 - 16 |
| 8 | 19151216 | | Washer 15/32 x 3/4 x 16 Ga. |
| 9 | 110810X | | Trunnion |
| 10 | 105848X | | Bolt, Shoulder 3/8 - 16 |
| 11 | 125631X | | Grip- Handle |
| 12 | 122364X | | Plunger - Lever |
| 13 | 121004X | | Lever - Lift (Includes Key No. 17) |
| 14 | 110739X | | Spring Washer |
| 15 | 73980600 | | Center Lock Flangenut 3/8 x 16 |
| 16 | 4939M | | Retainer - Spring |
| 17 | 121006X | | Rod - Lever |
| 18 | 4921H | | Retainer - Spring |
| 19 | 19171516 | | Washer 17/32 x 15/16 x 16 Ga. |
| 20 | 110029X | | Link - Lift |
| 21 | 124516X | | Shaft - Lift |
| 22 | 110448X | | Link - Lift, Adjust |
| 23 | 110447X | | Trunnion - Lift |
| 24 | 73710700 | | Nut Lock 7/16 - 20 UNF |
| 25 | 12000037 | | Klip Ring |
| 26 | 105864X | | Bracket - Suspension |
| 27 | 121252X | | Upstop Mower |
| 28 | 121598X | | Arm - Suspension - R.H. |
| 29 | 9135R | | Retainer Spring |
| 30 | 106308X | | Trunnion - Lift - Lower |
| 32 | STD541050 | * | Nut- Hex Fin. 1/2 - 13 |
| 33 | 121599X | | Arm - Suspension - L.H. |
| 34 | 12000022 | | E-Ring |
| 35 | STD533710 | * | Bolt - Carriage 3/8 - 16 x 1 |
| 36 | STD533707 | * | Bolt Carriage 3/8 - 16 x 3/4 |
| 37 | 19292016 | | Washer 29/32 x 1 - 1/4 x 16 Ga. |
| 38 | STD541237 | * | Nut., Hex Jam 3/8 - 16 |
| 39 | STD541343 | * | Nut - Hex Jam 7/16-20 |
| 40 | 74780624 | | Bolt - Hex 3/8 - 16 x 1 - 1/2 |
| 41 | 122365X | | Button - Plunger |

*STANDARD HARDWARE—PURCHASE LOCALLY

NOTE: All component dimensions given in U.S. inches - 1 inch = 25.4 mm

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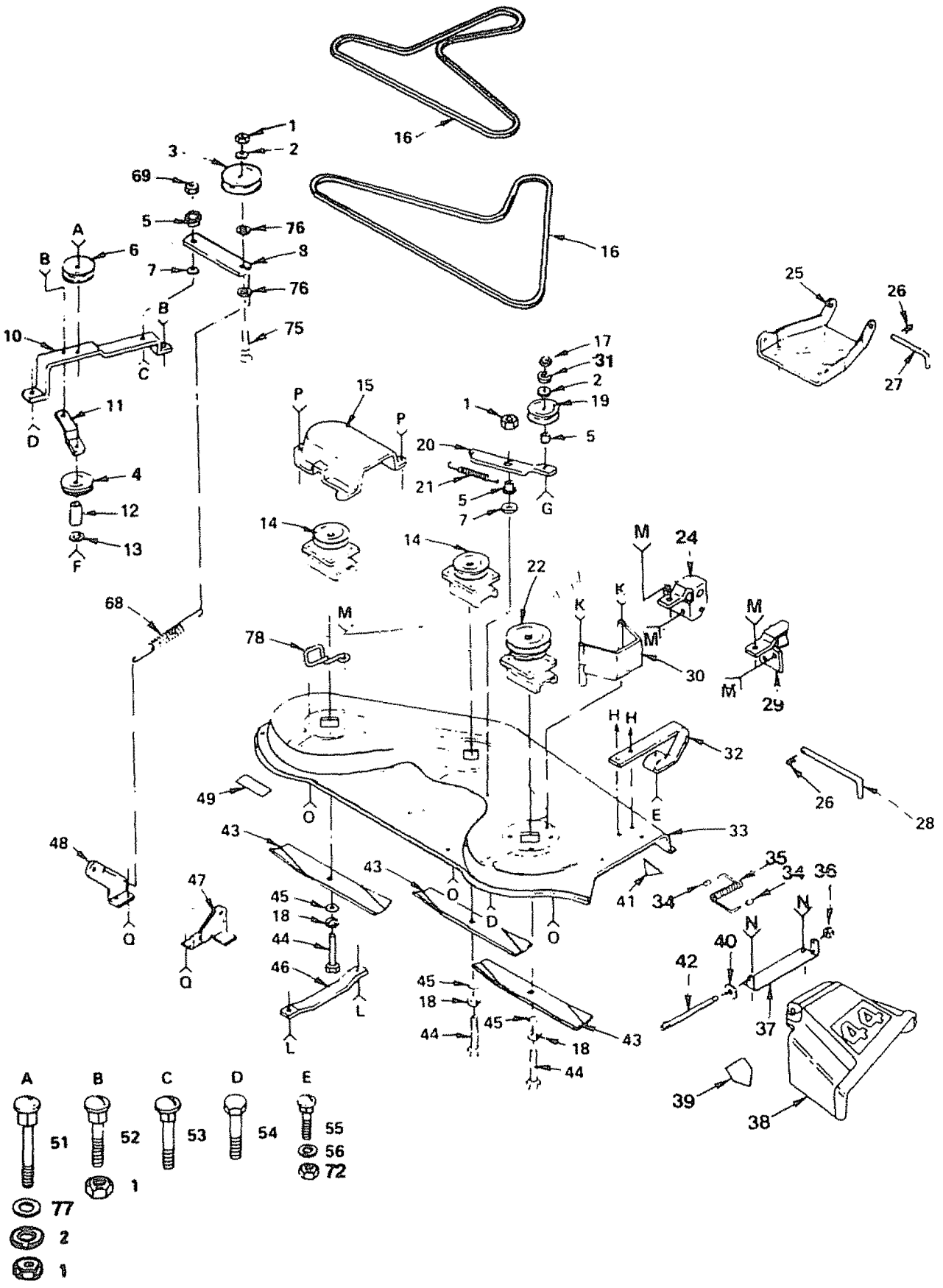
# REPAIR PARTS

## 20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460

**MOWER**

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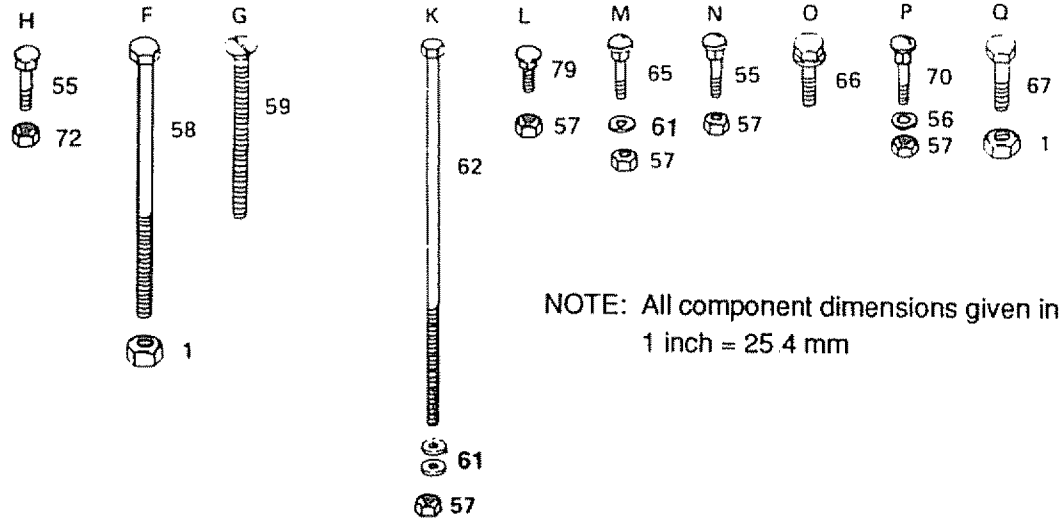
# REPAIR PARTS

## 20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460

**MOWER**

| KEY NO. | PART NO. | | DESCRIPTION |
|---|---|---|---|
| 1 | STD541437 | * | Nut - Lock 3/8 - 16 |
| 2 | 19131614 | | Washer 13/32 x 1 x 14 Ga. |
| 3 | 121316X | | Pulley Idler |
| 4 | 102403X | | Pulley, Idler |
| 5 | 106902X | | Spacer |
| 6 | 677A451 | | Pulley Idler |
| 7 | 106513X | | Washer - Wear |
| 8 | 121425X | | Arm - Idler |
| 10 | 106523X | | Bar Support - Idler |
| 11 | 106522X | | Brace - Idler - Deck |
| 12 | 121236X | | Spacer |
| 13 | STD551037 | * | Washer, 13/32 X 13/16 X 16 Ga. |
| 14 | 121658X | | Mandrel - Secondary |
| 15 | 106214X | | Guard |
| 16 | 106085X | | V Belt |
| 17 | STD541037 | * | Nut, Hex 3/8 - 16 |
| 18 | STD551137 | * | Washer - Lock 3/8 |
| 19 | 102932X | | Idler - Flat |
| 20 | 106526X | | Arm - Idler - Deck |
| 21 | 7644J | | Spring- Extension |
| 22 | 121705X | | Mandrel - Primary |
| 24 | 106511X | | Bracket Lift L.H. |
| 25 | 105662X | | Link Parallel |
| 26 | 4921H | | Retainer - Spring |
| 27 | 105744X | | Pln, Front Hinge |
| 28 | 109835X | | Pin, Rear Hinge |
| 29 | 106512X | | Bracket Lift - R.H. |
| 30 | 108119X | | Guard Bel t - R.H. |
| 31 | 10040600 | | Washer, Lock Hvy. Hel. Spring |
| 32 | 8418J | | Runner - R. H . |
| 33 | 121423X | | Housing - Mower |
| 34 | 105304X | | Cap Sleeve |
| 35 | 106734X | | Spring |
| 36 | 110452X | | Nut . Push |
| 37 | 109743X | | Bracket - Deflector |
| 38 | 109785X | | Guard - Discharge |
| 39 | 121343X | | Decal - Warning |
| 40 | 19111016 | | Washer 11/32 x 5/8 x 16 Ga. |
| 41 | | | Decal OPEI ( not serviced) |
| 42 | 106735X | | Rod Hinge |
| 43 | 106635X | | Blade |
| 44 | STD623715 | * | Bolt- Hex 3/8 - 24 x 1- 1/2 Gr. 5 |
| 45 | 19132012 | | Washer 13/32 x 1-1/4 x 12 Ga. |
| 46 | 7631J | | Runner - L.H. |
| 47 | 123807X | | Bracket Suspension, Rear- R.H. |
| 48 | 123808X | | Bracket - Suspension, Rear- L.H. |
| 49 | 106223X | | Decal- V-Belt - Schematic |
| 51 | STD533717 | * | Bolt - Carriage 3/8 - 16 x 1 - 3/4 |
| 52 | STD533710 | * | Bolt - Carriage 3/8 - 16 x 1 |
| 53 | STD533715 | * | Bolt - Carriage 3/8 16 x 1-1/2 |
| 54 | STD523712 | * | Bolt - Hex 3/8 - 16 x 1 - 1/4 |
| 55 | STD533107 | * | Bolt - Carriage 5/16- 18 x 3,'4 |
| 56 | STD551031 | * | Washer 11/32 x 11/16x 16 Ga. |
| 57 | STD541431 | * | Nut - Lock 5/16- 18 |
| 58 | STD523730 | * | Bolt - Hex 3/8 - 16 x 3 |
| 59 | 74110632 | | Screw - Flat Head 3/8 - 16 x 2 |
| 61 | 19111216 | | Washer 11/32 x 3/4x 16 Ga. |
| 62 | STD523150 | * | Bolt - Hex 5/16 18 x 5 |
| 65 | STD533107 | * | Bolt - Carriage 5/16 - 18 x 5/8 UNC x 3/4 |
| 66 | 17490612 | | Screw - Hex Washer Thread Rolling 3/8 16 x 3/4 |
| 67 | STD533707 | * | Bolt - Carriage 3/8 - 16 x 3/4 |
| 68 | 102727X | | Spring - Extension |
| 69 | STD541437 | * | Nut - Centerlock 3/8 - 16 |
| 70 | STD533107 | * | Bolt - Carriage 5/16 - 18 x 3/4 |
| 72 | 1685H | | Nut - Lock 5/16 - 18 |
| 75 | 72140620 | | Bolt, Carriage 3/8 - 16 X 2 1/2 |
| 76 | 19131210 | | Washer 13/32 x 3/4 x 10 Ga. |
| 77 | STD533106 | | Washer, 13/32 X 7/8 X 10 Ga. |
| 78 | 121352X | | Keeper - L.H. Mandrel |
| 79 | 72110505 | * | Bolt - Carriage 5/16 - 18 X 5/8 |
| --- | 125493X | | Mower Deck, Complete |

* STANDARD HARDWARE--PURCHASE LOCALLY




NOTE: All component dimensions given in U.S. inches - 1 inch = 25.4 mm

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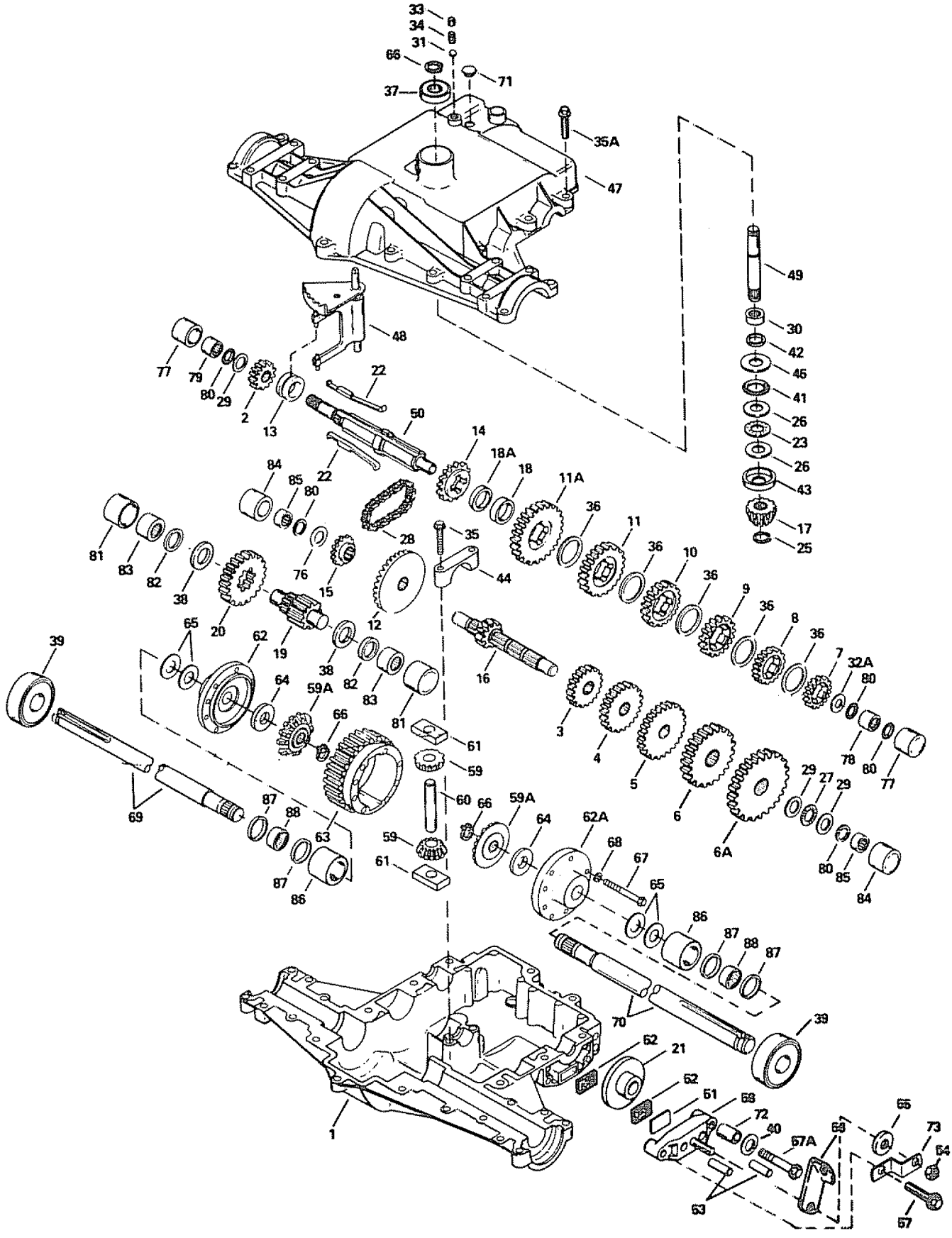
# REPAIR PARTS

## 20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 AND 917.250040

## TRANSAXLE PEERLESS - - MODEL NUMBER 143-820-016

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# REPAIR PARTS

## 20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 AND 917.250040
## TRANSAXLE PEERLESS - - MODEL NUMBER 143-820-016

| Ref. No. | Part No. | Part Name | Ref. No. | Part No. | Part Name |
|---|---|---|---|---|---|
| 1 | 770088 | Case, Transaxle | 44 | 786131 | Cap, Bearing |
| 2 | 778253 | Gear, Spur (15 teeth) | 45 | 780165 | Washer, Flat |
| 3 | 778211 | Gear, Spur (12 teeth) | 47 | 772098 | Cover, Transaxle |
| 4 | 778240 | Gear, Spur (18 teeth) | 48 | 784342 | Rod & Fork Assy., Shift |
| 5 | 778201 | Gear. Spur (25 teeth) | 49 | 776274 | Shaft, Input |
| 6 | 778202 | Gear, Spur (28 teeth) | 50 | 776313 | Shaft, Brake (4 Keyed) |
| 6A | 778208 | Gear, Spur (31 teeth) | 51 | 790007 | Plate, Brake pad |
| 7 | 778209 | Gear, Spur (19 teeth) | 52 | 790006 | Pad, Brake |
| 8 | 778203 | Gear, Spur (22 teeth) | 53 | 786026 | Pin, Dowel |
| 9 | 778204 | Gear, Spur (25 teeth) | 54 | 792075 | Locknut, 5/16-24 |
| 10 | 778239 | Gear. Spur (32 teeth) | 55 | 792076 | Washer, Flat |
| 11 | 778207 | Gear, Spur (37 teeth) | 56 | 790047 | Lever, Brake |
| 11A | 778216 | Gear. Spur (41 teeth) | 57 | 792073 | Screw, Flanged hex hd thread-forming, 1/4-20 x 1-1/4 |
| 12 | 778246 | Gear, Bevel (33 teeth) | | | |
| 13 | 784216 | Collar, Shift | 57A | 792085 | Screw, Flanged hex hd thread-forming, 1/4-20 x 2-1/4 |
| 14 | 786123 | Sprocket (18 teeth) | | | |
| 15 | 786082 | Sprocket (9 teeth) | 58 | 790025 | Holder, Brake pad |
| 16 | 776291 | Shaft, Counter (w/9 tooth gear) | 59 | 778197 | Pinion, Differential bevel |
| 17 | 778245 | Bevel Pinion, Input (13 teeth) | 59A | 778198 | Gear, Bevel |
| 18 | 786121 | Spacer, Netural (.350/.340 thick) | 60 | 786019 | Pin, Drive |
| 18A | 786122 | Spacer, Netural (.276/.268 thick) | 61 | 786027 | Block, Drive |
| 19 | 776275 | Shaft. Output (9 teeth) | 62 | 774833 | Carrier, Differential (Threaded holes) |
| 20 | 778247 | Gear. Output (35 teeth) | 62A | 774834 | Carrier, Differential |
| 21 | 790043 | Disk. Brake | 63 | 778248 | Gear, Ring (31 teeth) |
| 22 | 792138 | Key | 64 | 780107 | Washer |
| 23 | 780084 | Bearing, Thrust | 65 | 780042 | Washer, Thrust |
| 25 | 788040 | Ring, Retaining | 66 | 792018 | Ring, Snap |
| 26 | 780051 | Washer. Thrust | 67 | 792020 | Screw, Hex hd., 1/4-20 x 2-1/4 |
| 27 | 780071 | Bearing, Thrust | 68 | 792006 | Lockwasher, 1/4" |
| 28 | 786081 | Chain, Roller (No 41 chain, 24 links) | 69 | 774832 | Axle (12-5/16" long) |
| 29 | 780072 | Washer, Thrust | 70 | 774831 | Axle (16-3/16" long) |
| 30 | 780155 | Bearing, Needle | 71 | 792074 | Plug, Hex hd , 9/16-18 thread |
| 31 | 792077 | Ball, Steel | 72 | 786067 | Spacer |
| 32A | 780139 | Washer, Thrust | 73 | 786086 | Bracket, Brake lever |
| 33 | 792078 | Screw, Set, 3/8-16 x 3/8 | 76 | 780153 | Washer |
| 34 | 792079 | Spring | 77 | 786144 | Sleeve (stepped) |
| 35 | 792073 | Screw, Flanged hex hd thread-forming, 1/4-20 x 1-1/4 | 78 | 780150 | Bearing, Needle |
| | | | 79 | 780152 | Bearing, Needle (capped) |
| 35A | 792129 | Screw, Hex hd threadforming. 5/16-18 x 1-1/4 | 80 | 792001 | "O" Ring |
| | | | 81 | 786142 | Sleeve (stepped) |
| 36 | 780108 | Washer. Thrust | 82 | 788071 | Ring, Square cut |
| 37 | 780119 | Bearing, Ball | 83 | 780049 | Bearing, Needle (capped) |
| 38 | 780128 | Washer, Thrust | 84 | 786143 | Sleeve (stepped) |
| 39 | 780050 | Bearing, Ball | 85 | 780151 | Bearing, Needle (capped) |
| 40 | 792128 | Washer, Flat | 86 | 786145 | Sleeve (stepped) |
| 41 | 788077 | "O" Ring | 87 | 788070 | Ring, Square cut |
| 42 | 788042 | Seal, Oil | 88 | 780031 | Bearing, Needle |
| 43 | 780166 | Washer. Cupped | | | |

NOTE: All component dimensions given in U.S. inches.
1 inch = 25.4 mm.



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# REPAIR PARTS

## 20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 and 917.250040
## ENGINE MODEL NUMBER MV20S, 57517

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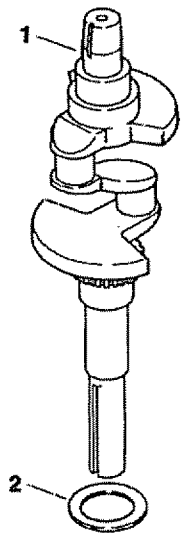
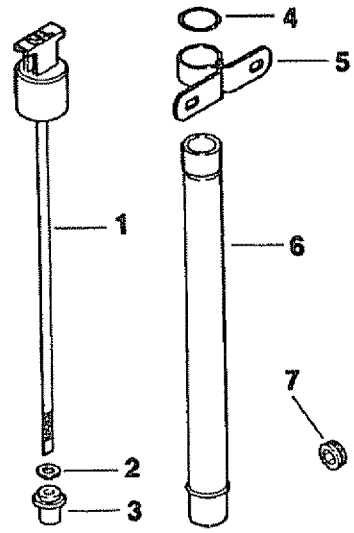
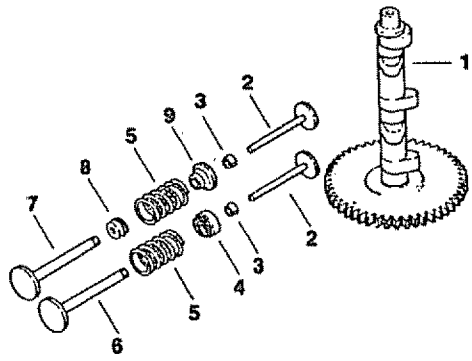
### CRANKSHAFT



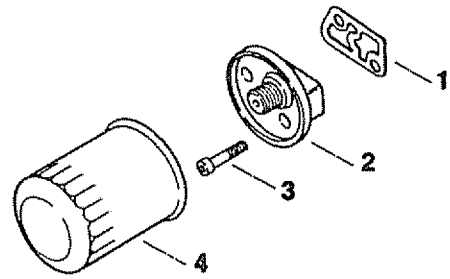

### DIPSTICK



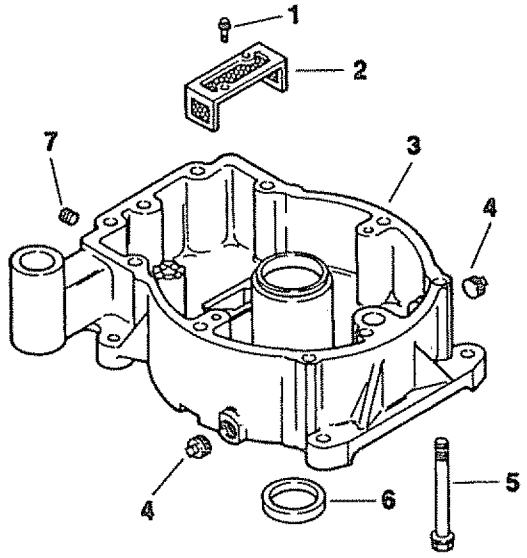

### CAMSHAFT AND VALVES



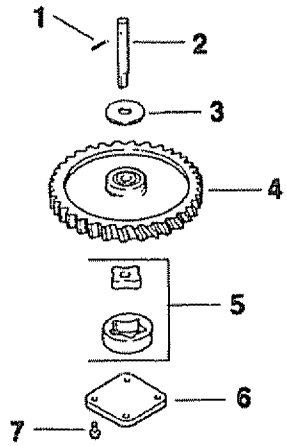

### OIL FILTER




### OIL PAN




### OIL PUMP



# REPAIR PARTS

## 20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 and 917.250040
## ENGINE MODEL NUMBER MV20S, 57517

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### CRANKSHAFT

| KEY NO. | PART NO. | DESCRIPTION |
|---|---|---|
| 1 | 82 014 07 | Crankshaft |
| 2 | 52 468 03 | "Washer, thrust .119/.122 (A.R.)" |
| | 52 468 04 | "Washer, thrust .128/.131" |
| | 52 468 05 | "Washer, thrust .137/.140 (A.R.)" |

### OIL FILTER

| KEY NO. | PART NO. | DESCRIPTION |
|---|---|---|
| 1 | 52 041 16 | "Gasket, oil filter" |
| 2 | 52 181 03 | "Adapter, oil filter" |
| 3 | X-55-15 | "Screw, hex. socket hd 5/16-18x1-1/4 (2)" |
| 4 | 52 050 02 | Oil filter |

### CAMSHAFT & VALVES

| KEY NO. | PART NO. | DESCRIPTION |
|---|---|---|
| 1 | 52 012 09 | Camshaft |
| 2 | 52 019 03 | Tappet (4) |
| 3 | 41 755 10 | "Kit, retainer (4)" |
| 4 | 52 413 01 | "Rotator, exhaust valve (2)" |
| 5 | 25 089 01 | "Spring, valve (4)" |
| 6 | 52 016 06 | "Valve, exhaust (2)" |
| 7 | 52 017 07 | "Valve, intake (2)" |
| 8 | 52 032 13 | "Seal, intake valve stem (2)" |
| 9 | 230011 | "Retainer, intake valve (2)" |

### DIPSTICK

| KEY NO. | PART NO. | DESCRIPTION |
|---|---|---|
| 1 | 52 038 08 | "Dipstick 13-1/2"" blade" |
| 2 | X-25-44 | "Washer, plain 5/16" |
| 3 | 52 032 14 | "Seal, rubber" |
| 4 | 41 153 01 | O-Ring |
| 5 | 52 126 11 | "Bracket, oil tube support" |
| 6 | 52 123 20 | "Tube, oil fill 11-7/8""" |
| 7 | 47 139 01 | "Plug, hex. ctsk. 3/4""N.P.T.F." |

### OIL PAN

| KEY NO. | PART NO. | DESCRIPTION |
|---|---|---|
| 1 | X-67-64 | "Screw, hex. wash. hd. 10-32x7/16 (2)" |
| 2 | 52 050 03 | "Filter, oil pickup" |
| 3 | 52 199 03 | Oil pan |
| 4 | X-75-10 | "Plug, sq. hd. 3/8 N.P.T.F. (2)" |
| 5 | 52 086 12 | "Screw, hex. wash. hd. 5/16-18x1-1/4 (9)" |
| 6 | 52 032 10 | "Seal, rear oil" |

### OIL PUMP

| KEY NO. | PART NO. | DESCRIPTION |
|---|---|---|
| 1 | X-280-25 | "Pin, roll" |
| 2 | 52 144 05 | "Shaft, oil pump" |
| 3 | 52 422 01 | "Spacer, shim (A.R. max. 2)" |
| 4 | 52 043 05 | "Gear, oil pump" |
| 5 | 52 393 09 | Rotor set |
| 6 | 52 096 03 | "Cover, oil pump" |
| 7 | X-67-64 | "Screw, hex. wash. hd. 10-32x7/16 (4)" |

# REPAIR PARTS

## 20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 and 917.250040
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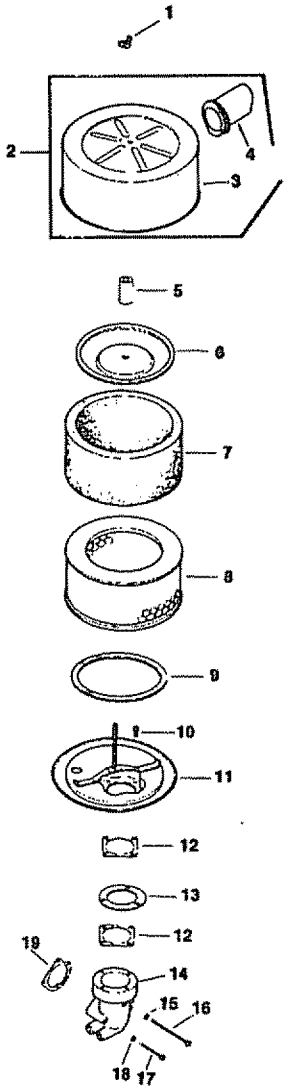
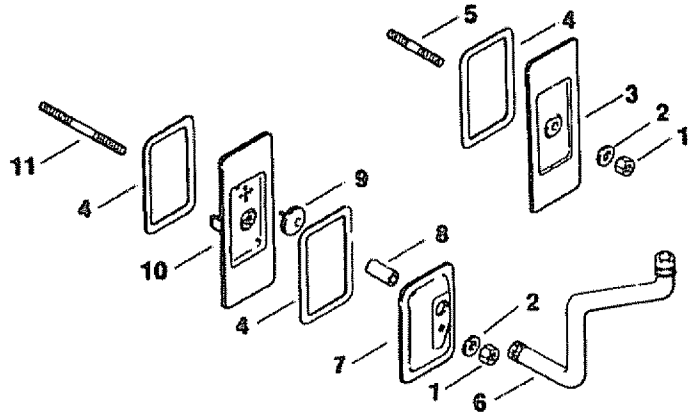
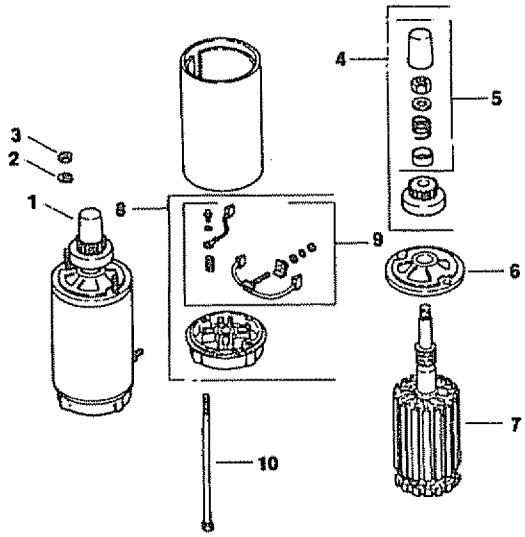
### AIR INTAKE



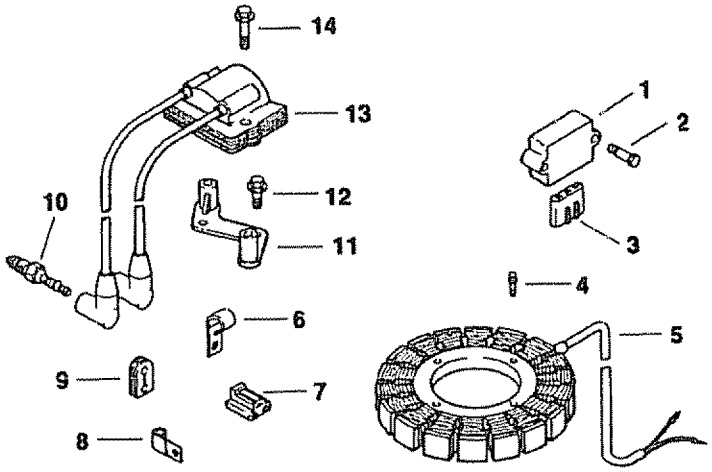

### BREATHER & VENT



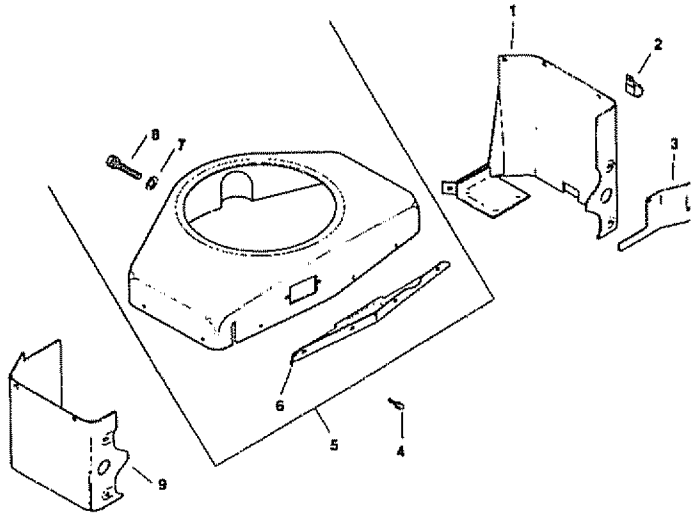

### ELECTRIC START




### IGNITION




### BAFFLES & SHROUD



# REPAIR PARTS

## 20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 and 917.250040
## ENGINE MODEL NUMBER MV20S, 57517

### AIR INTAKE

| KEY NO. | PART NO. | DESCRIPTION |
|---|---|---|
| 1 | X-276-7 | Wing nut 1/4-20 |
| 2 | 52 755 83 | "Kit, cover & tube (Includes 3,4 & decal 52 113 30)" |
| 3 | 52 755 83 | "Cover, air cleaner" |
| 4 | 52 123 21 | "Tube, air intake" |
| 5 | 231032 | "Seal, element cover" |
| 6 | 52 082 04 | "Cover, air cleaner element" |
| 7 | 45 083 01 | Precleaner |
| 8 | 45 083 02 | Element |
| 9 | 237423 | "Seal, air cleaner cover" |
| 10 | X-67-98 | "Screw, hex. wash. hd. 10-32 x 9/16 (4)" |
| 11 | 52 201 06 | "Base, air cleaner" |
| 12 | 277093 | "Gasket, air cleaner (2)" |
| 13 | 52 112 11 | Spacer |
| 14 | 52 054 34 | "Elbow, air intake" |
| 15 | X-22-9 | "Washer, I.T. #10 (2)" |
| 16 | X-50-57 | "Screw, sltd. pan hd.10-32 x 1-3/4 (2)" |
| 17 | X-50-37 | "Screw, sltd. pan hd. 10-32 x 2-1/4 " |
| 18 | X-25-79 | "Washer, plain #10" |
| 19 | 277069 | "Gasket, elbow" |
| — | 25 113 07 | "Decal, air cleaner" |

### IGNITION

| KEY NO. | PART NO. | DESCRIPTION |
|---|---|---|
| 1 | 25 755 03 | "Kit, rectifier-regulator (Includes 2)" |
| 2 | X-132-5 | "Screw, H.C. 1/4-20xS/8 (2)" |
| 3 | 236602 | Connector |
| 4 | X-67-51 | "Screw, H.C. 10-24x3/4 (4)" |
| 5 | 237878 | "Kit, stator" |
| 6 | 210281 | Clip |
| 7 | 236473 | Connector |
| 8 | 48 154 01 | Clamp |
| 9 | 52 313 02 | Grommet |
| 10 | 51 132 02 | Spark plug (2) |
| 11 | 52 126 08 | "Bracket, module" |
| 12 | 25 086 16 | "Screw, hex. wash. hd. 1/4-20x7/8 (2)" |
| 13 | 52 584 02 | "Module, ignition" |
| 14 | 25 086 15 | "Screw, hex. wash. hd. 1/4-20xl (2)" |
| — | 47 518 33 | "Lead, violet, rectifier-reg.(11"" - 14 gauge - uninsulated push on tab terminals)" |
| — | 52 518 17 | "Lead, white, module to connector (12-1/2"" - 18 gauge - insulated push on tab and uninsulated push on tab terminals)" |

### BREATHER & VENT

| KEY NO. | PART NO. | DESCRIPTION |
|---|---|---|
| 1 | X-81-1 | "Nut, hex. 1/4-20 (2)" |
| 2 | X-25-12 | "Washer, plain 1/4 (2)" |
| 3 | 52 096 18 | "Cover, #2 cylinder valve" |
| 4 | 52 055 01 | "Gasket, cover (3)" |
| 5 | X-352-39 | "Stud, #2 cylinder valve cover 1/4-20x2-1/4" |
| 6 | 52 326 12 | "Hose, breather" |
| 7 | 52 096 08 | "Cover, #1 upper cyl. valve" |
| 8 | 52 032 04 | "Seal, breather" |
| 9 | 52 462 01 | "Valve, umbrella" |
| 10 | 52 096 22 | "Cover, #1 lower cyl. valve" |
| 11 | 275220 | "Stud, #1 cylinder valve cover 1/4-20x3-1/4" |

### ELECTRIC START

| KEY NO. | PART NO. | DESCRIPTION |
|---|---|---|
| 1 | 52 098 10 | Starter assembly (Includes 4-10) |
| 2 | X-20-1 | "Washer, lock 1/4 (2)" |
| 3 | X-81-1 | "Nut, hex. 1/4-20 (2)" |
| 4 | 52 755 05 | "Kit, drive (Includes 5)" |
| 5 | 52 755 08 | "Kit, drive parts" |
| 6 | 52 227 01 | "Cap, drive end" |
| 7 | 52 170 03 | Armature |
| 8 | 52 227 08 | "Cap, commutator end (Includes 9)" |
| 9 | 52 755 15 | "Kit, brush" |
| 10 | 52 211 03 | "Bolt, thru 1/4-20x6-7/8 (2)" |
| — | 25 450 03 | "Tag, caution" |

### BAFFELS & SHROUD

| KEY NO. | PART NO. | DESCRIPTION |
|---|---|---|
| 1 | 52 063 30 | "Baffle, #2 cylinder head" |
| 2 | 48 154 01 | Clamp |
| 3 | 52 063 01 | "Baffle, #2 cylinder top" |
| 4 | X-67-83 | "Screw, hex. wash. hd. 1/4-20 x 7/16 (20)" |
| 5 | 52 755 70 | "Kit, blower housing (Includes 6-8)" |
| 6 | 52 217 01 | "Support, upper housing" |
| 7 | 52 468 16 | "Washer, flat 1/4 (2)" |
| 8 | 52 086 11 | Screw 1/4-20x5/8 (2) |
| 9 | 52 124 05 | "Baffle, #1 cylinder head" |

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# REPAIR PARTS

## 20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 and 917.250040
## ENGINE MODEL NUMBER MV20S, 57517

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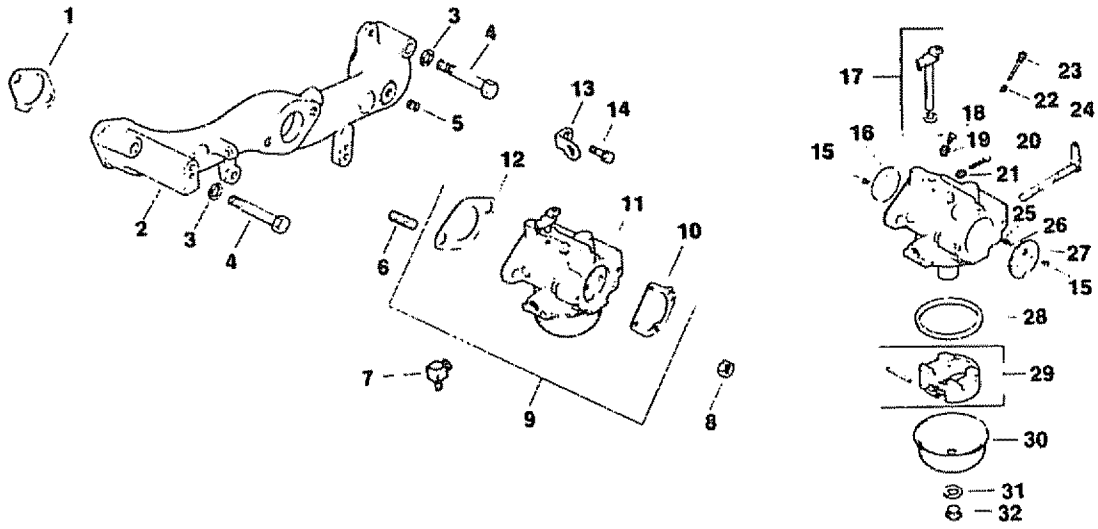
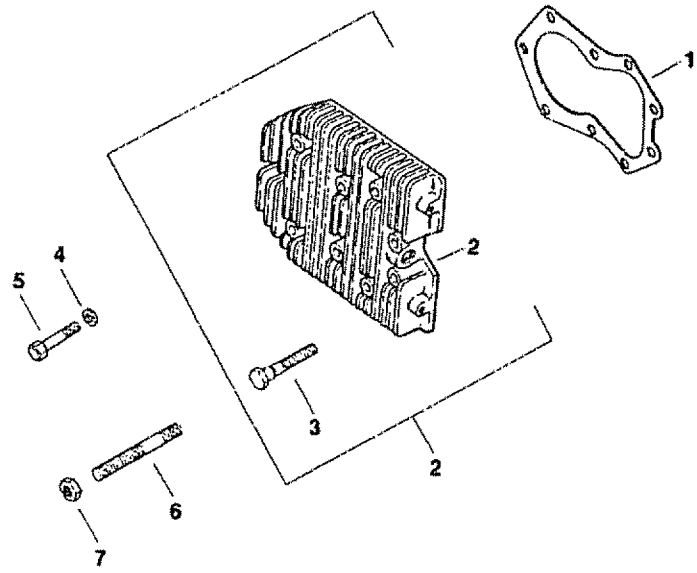
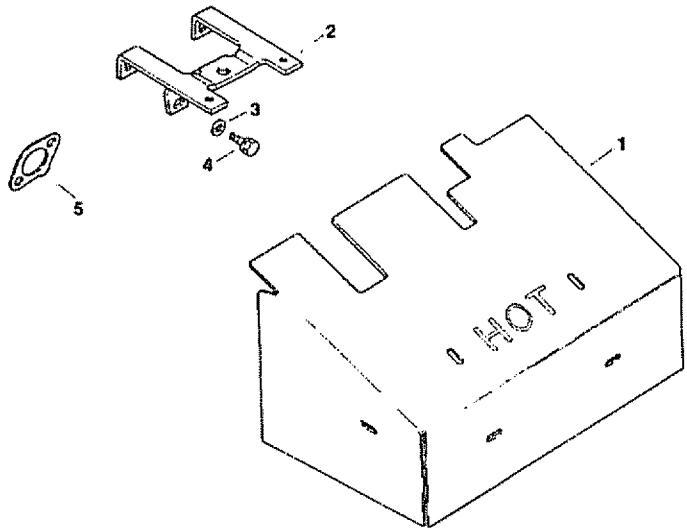
### CARBURETOR



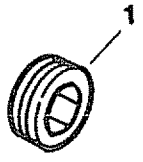

### CYLINDER HEAD




### EXHAUST




### LOW OIL PRESSURE CUTOUT



# REPAIR PARTS

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### CARBURETOR

| KEY NO. | PART NO. | DESCRIPTION |
|---|---|---|
| 1 | 52 041 09 | "Gasket, intake (2)" |
| 2 | 52 164 15 | "Manifold, intake" |
| 3 | X-25-44 | "Washer, plain 5/16 (4)" |
| 4 | X-6-29 | "Screw, H.C. 5/16-18x1-1/4 (4)" |
| 5 | X-73-23 | Plug |
| 6 | X-352-37 | Stud 5/16-18xl (2) |
| 7 | 25 155 02 | "Connector, hose" |
| 8 | X-77-2 | Nut 5/6 (2) |
| 9 | 52 853 29 | "Kit, carburetor w/gasket (Includes 10-13,15-32) " |
| 10 | 277069 | "Gasket, air cleaner" |
| 11 | 52 053 55 | Carburetor (For information only not available separately) |
| 12 | 271030 | "Gasket, carburetor" |
| 13 | 232867 | "Strap, lifting" |
| 14 | X-67-62 | "Screw, hex. wash. hd. 1/4-20x3/4" |
| 15 | 25 086 27 | "Screw, throttle & choke plate (4)" |
| 16 | 25 146 02 | "Plate, throttle" |
| 17 | 52 144 16 | "Shaft, throttle w/lever & seal" |
| 18 | 25 368 01 | "Needle, idle fuel adj." |
| 19 | 25 089 02 | "Spring, idle fuel" |
| 20 | 25 086 26 | "Screw, idle speed adj." |
| 21 | 25 089 04 | "Spring, idle speed" |
| 22 | 25 089 02 | "Spring, main fuel" |
| 23 | 25 368 03 | "Needle, main fuel" |
| 24 | 52 090 13 | "Lever, choke" |
| 25 | 25 089 03 | "Spring, choke friction" |
| 26 | 25 194 01 | "Ball, choke friction" |
| 27 | 25 146 03 | "Plate, choke" |
| 28 | 25 041 04 | "Gasket, bowl" |
| 29 | 25 757 09 | "Kit, float" |
| 30 | 25 104 01 | "Bowl, fuel" |
| 31 | 25 041 03 | "Gasket, bowl retainer screw" |
| 32 | 25 100 05 | "Screw, bowl retainer" |
| — | 25 757 11 | "Kit, carburetor repair" |

### CYLINDER HEAD

| KEY NO. | PART NO. | DESCRIPTION |
|---|---|---|
| 1 | 52 041 18 | "Gasket, head (2)" |
| 2 | 52 755 78 | "Kit, cylinder head (2) (Includes 3)" |
| 3 | 25 086 07 | "Screw, hex. machine 5/16-18x2 (4)" |
| 4 | 220534 | "Washer, plain 5/16 (18)" |
| 5 | 41 086 02 | "Screw, hex. hd. 5/16-18x1-1/2 (8)" |
| 6 | 52 072 15 | Stud 5/16-18x2 (6) |
| 7 | X-82-2 | "Nut, hex. 5/16-18 (6)" |

### EXHAUST

| KEY NO. | PART NO. | DESCRIPTION |
|---|---|---|
| 1 | 52 281 31 | "Shield, heat" |
| 2 | 52 126 12 | Bracket |
| 3 | X-25-72 | "Washer, plain (3)" |
| 4 | 52 086 11 | Screw 1/4-20x5/8 (3) |
| 5 | 52 041 14 | "Gasket, exhaust (2)" |

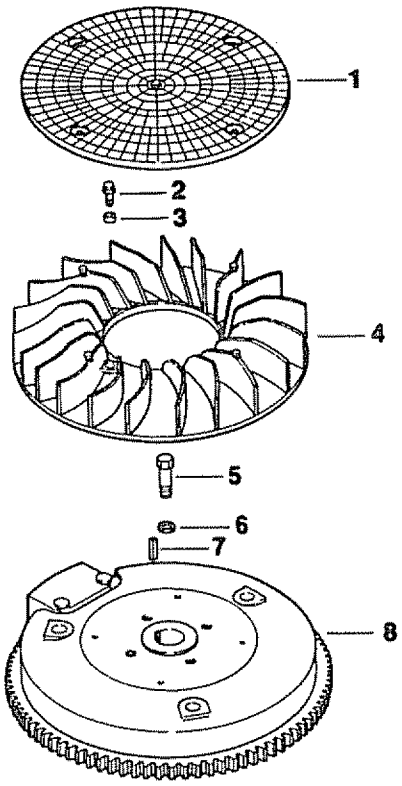
### LOW OIL PRESSURE CUTOUT

| KEY NO. | PART NO. | DESCRIPTION |
|---|---|---|
| 1 | X-75-23 | "Plug, pipe 1/8 N.P.T.F." |
| | 52 755 94 | Gasket Set |
| | 82 522 23 | Short Block |

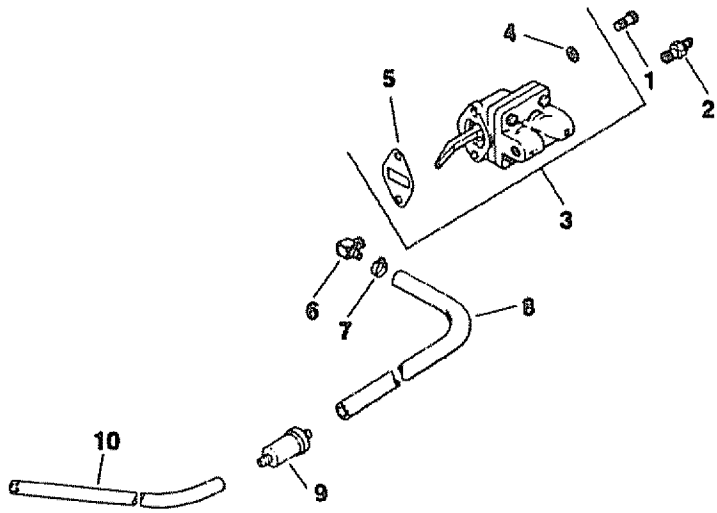
# REPAIR PARTS

## 20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 and 917,250040
## ENGINE MODEL NUMBER MV20S, 57517

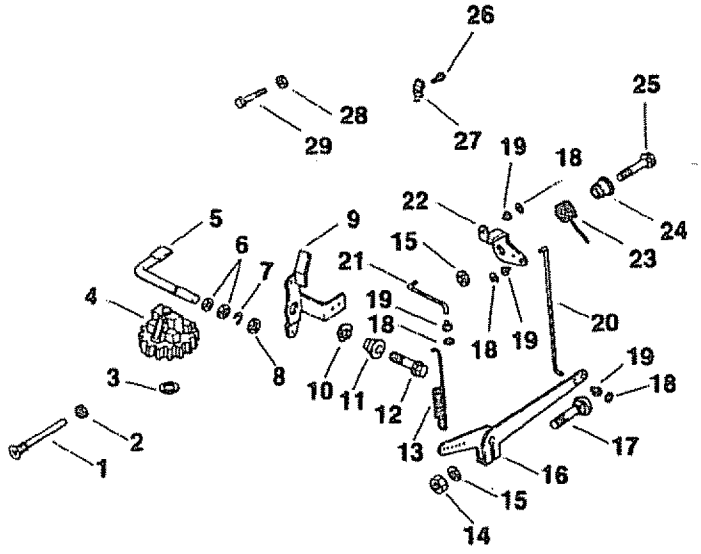
### FLYWHEEL



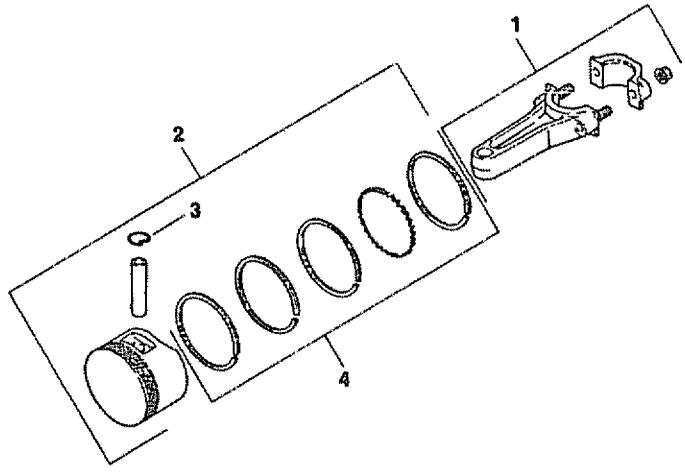

### FUEL PUMP




### GOVERNOR




### PISTON & ROD

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### FLYWHEEL

| KEY NO. | PART NO. | DESCRIPTION |
|---|---|---|
| 1 | 25 162 01 | "Screen, grass" |
| 2 | 25 086 21 | "Screw, hex. wash. hd. 1/4-20x5/8 (4)" |
| 3 | 25 112 04 | Spacer (4) |
| 4 | 25 157 01 | Fan |
| 5 | 25 086 24 | "Screw, hex. machine 3/8-24x1-1/4" |
| 6 | 52 468 15 | "Washer, plain" |
| 7 | X-286-17 | "Key, square 3/16x7/8" |
| 8 | 52 025 36 | Flywheel |

### GOVERNOR

| KEY NO. | PART NO. | DESCRIPTION |
|---|---|---|
| 1 | 231355 | "Pin, governor stop" |
| 2 | X-25-12 | "Washer, plain 1/4" |
| 3 | 237022 | "Washer, thrust" |
| 4 | A-235743-S | "Kit, governor gear" |
| 5 | 52 078 04 | "Shaft, governor cross" |
| 6 | X-25-102 | "Washer, plain 1/4 (2)" |
| 7 | X-269-28 | "Retainer, governor" |
| 8 | X-25-63 | "Washer, plain 1/4" |
| 9 | 52 090 18 | "Lever, speed control" |
| 10 | 277341 | "Washer, tension" |
| 11 | 25 431 01 | "Bushing, speed control lever" |
| 12 | 25 086 21 | "Screw, hex. wash. hd. 1/4-20x5/8" |
| 13 | 52 089 07 | "Spring, governor" |
| 14 | X-81-1 | "Nut, hex. 1/4-20" |
| 15 | X-25-72 | "Washer, plain 1/4 (2)" |
| 16 | 52 186 09 | "Arm, governor" |
| 17 | 52 211 04 | "Screw, R.H. sq. neck 1/4-20xl" |
| 18 | 25 141 03 | "Ring, retaining (4)" |
| 19 | 25 158 08 | "Bushing, linkage retaining (4)" |
| 20 | 52 079 07 | "Linkage, governor" |
| 21 | 52 079 06 | "Linkage, throttle" |
| 22 | 52 090 14 | "Lever, throttle" |
| 23 | 52 089 08 | "Spring, torsion" |
| 24 | 52 158 07 | "Bushing, thr. control lever" |
| 25 | 25 086 15 | "Screw, hex. wash. hd. 1/4-20xl" |
| 26 | X-67-97 | "Screw, hex. wash. hd. 10-24x3/8 (3)" |
| 27 | 235778 | Clamp (3) |
| 28 | X-70-3 | "Nut, hex. 10-32" |
| 29 | 52 086 05 | "Screw, hex. hd. 10-32x7/8" |

### FUEL PUMP

| KEY NO. | PART NO. | DESCRIPTION |
|---|---|---|
| 1 | 47 086 08 | "Screw, pozidriv T.H. 1/4-20x5/8 (2)" |
| 2 | X-380-1 | "Connector, straight" |
| 3 | 52 559 01 | "Pump, fuel assembly (Includes 4 & 5)" |
| 4 | X-25-63 | "Washer, plain 1/4 (2)" |
| 5 | 25 041 05 | "Gasket, fuel pump" |
| 6 | 25 155 02 | "Connector, hose" |
| 7 | X-426-9 | "Clamp, hose (4)" |
| 8 | 52 353 18 | "Line, fuel" |
| 9 | 45 050 01 | "Filter, fuel" |
| 10 | 41 353 14 | "Hose, fuel" |

### PISTON & ROD

| KEY NO. | PART NO. | DESCRIPTION |
|---|---|---|
| 1 | 52 067 71 | Connecting Rod (Std.) (2) |
| | 52 067 72 | Connecting Rod (.010) (2) |
| 2 | 52 874 16 | Piston w/Ring Set (Std.) (2) |
| | 52 874 17 | Piston w/Ring Set (.003) (2) |
| | 52 874 18 | Piston w/Ring Set (.010) (2) |
| | 52 874 19 | Piston w/Ring Set (.020) (2) |
| | 52 874 20 | Piston w/Ring Set (.030) (2) |
| 3 | 52 141 01 | "Retainer, piston pin (4)" |
| 4 | 52 108 09 | Ring Set (Std. & .003) (2) |
| | 52 108 10 | Ring Set (.010) (2) |
| | 52 108 11 | Ring Set (.020) (2) |
| | 52 108 12 | Ring Set (.030) (2) |

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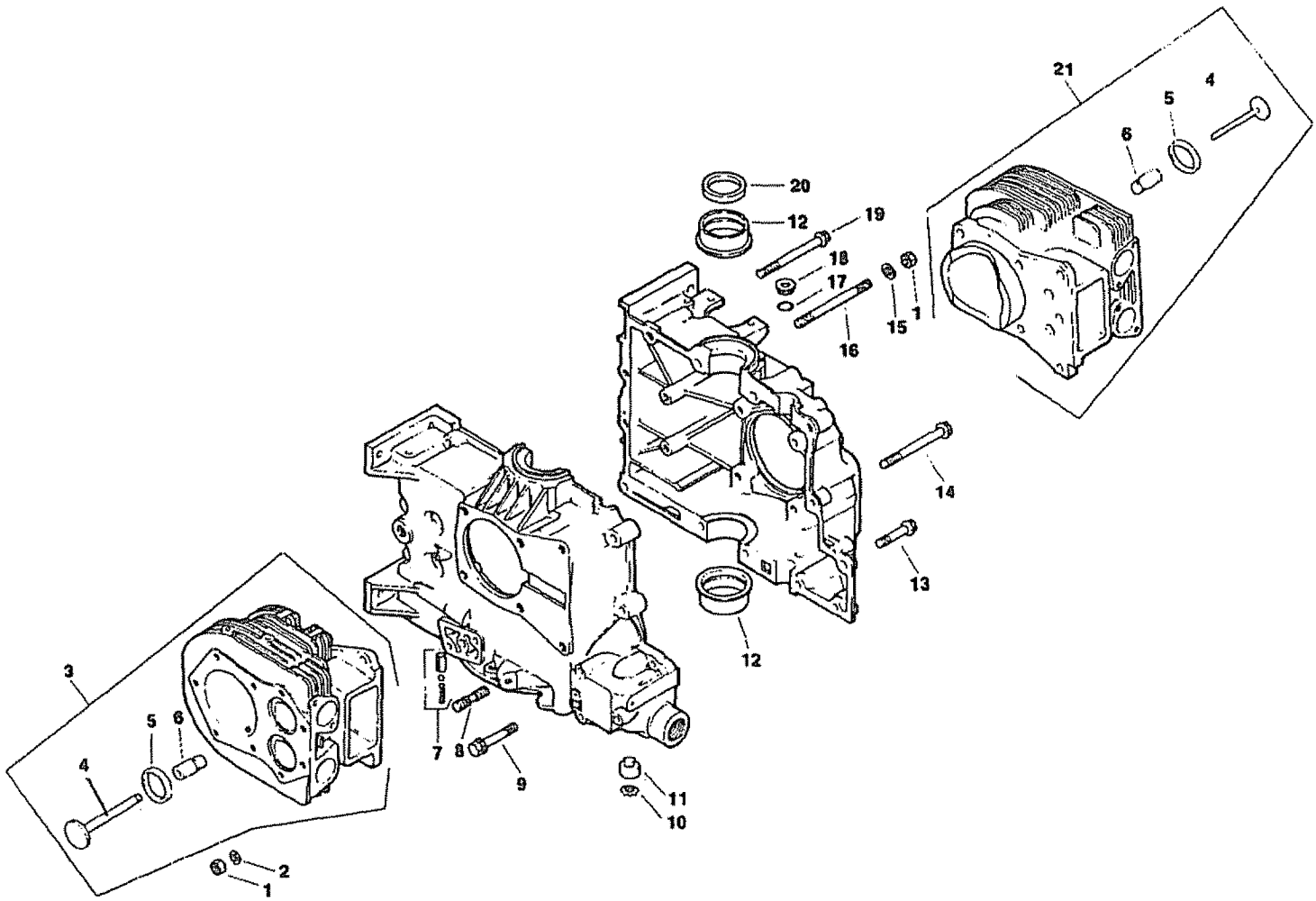
# REPAIR PARTS

## 20 H.P. GARDEN TRACTOR - MODEL NUMBER 917.254460 and 917.250040
## ENGINE MODEL NUMBER MV20S, 57517

### CRANKCASE




| KEY NO. | PART NO. | DESCRIPTION |
|---|---|---|
| 1 | X-82-2 | "Nut, hex. 5/16-18 (16)" |
| 2 | 52 468 12 | "Washer, flat 5/16 (12)" |
| 3 | 82 755 18 | "Kit, #1 cylinder barrel (Includes 4-6)" |
| 4 | 52 016 06 | "Valve, exhaust" |
| 5 | 52 031 01 | "Insert, valve seat (2)" |
| 6 | 52 316 06 | "Guide, valve (2)" |
| 7 | 52 755 50 | "Kit, oil relief" |
| 8 | 52 072 12 | "Step stud 5/16-18x3/4" ,3/8-16x5/8"",2"" long(12)" |
| 9 | 25 086 12 | "Screw, hex. flange 5/16-18x2 (2)" |
| 10 | X-269-43 | "Ring, retaining" |
| 11 | 52 078 05 | "Shaft, governor" |
| 12 | 52 030 10 | "Bearing, sleeve (Std.) (2)" |
| | 52 030 11 | "Bearing, sleeve (.010)" |
| | 52 030 12 | "Bearing, sleeve (.020)" |

| KEY NO. | PART NO. | DESCRIPTION |
|---|---|---|
| 13 | 25 086 10 | "Screw, hex. flange 5/16-18x1-1/2 (3)" |
| 14 | 25 086 13 | "Screw, hex. flange 3/8-16x3-5/8 (2)" |
| 15 | 41 468 01 | "Washer, plain (4)" |
| 16 | X-352-33 | Stud 5/16-18x4-1/8 (2) |
| 17 | 52 141 02 | O-ring |
| 18 | 52 139 08 | Plug |
| 19 | 25 086 11 | "Screw, hex. flange 5/16-18x3-1/2 (6)" |
| 20 | 52 032 10 | "Seal, front oil" |
| 21 | 82 755 19 | "Kit, #2 cylinder barrel (Includes 4-6)" |

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# SERVICE NOTES

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# SERVICE NOTES

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## Attachments That Add to the Usefulness of Your Craftsman Garden Tractor

Sears offers a wide variety of attachments that fit your tractor. Many of these are listed below with brief explanations of how they can help you. This list was current at the time of publication: however, it may change in future years — more attachments may be added, changes (including changes in the stock number) may be made in these attachments, or some may no longer be available.

Most of these attachments do not require additional hitches or conversion kits (those that do are indicated) and are designed for easy attaching and detaching. You may order these attachments at most Sears retail stores, catalog sales offices, and through the catalog.

LAWN SWEEPERS let you collect grass clippings and leaves.

| Stock No. | | Path | Capacity |
|---|---|---|---|
| 71-24030 | | 30-in. | 9.0 cu. ft. |
| 71-24032 | | 32-in. | 10.0 cu. ft. |
| 71-24033 | High-Performance | 32 in. | 11.5 cu. ft. |
| 71-24038 | | 38-in. | 12.5 cu. ft. |

LAWN VACS for powerful collections of heavy grass clippings and leaves. All accept Wand attachment to pick up debris in hard-to-reach places.

| Stock No. | Engine | Capacity | Also Required |
|---|---|---|---|
| 71-2452 | 3HP | 12 bu. | 71-26471 chute |
| 71-2447 | 5HP | 25bu. | 71-24474 chute |
| 71-2455 | 3HP | 8 bu. | 71-26471 chute |

CARTS make hauling easy.

| Stock No. | Size | Capacity | |
|---|---|---|---|
| 71-24353 | 4 cu. ft. | 400 lb. | Dump cart |
| 71-24354 | 10 cu. ft. | 1,000 lb. | Hauling cart |
| 71-24355 | 10 cu. ft. | 1,000 lb. | Dump cart |
| 71-24356 | 14 cu. ft. | 1,250 lb. | Dump cart |
| 71-24357 | 17 cu. ft. | 1, 500 lb. | Dump cart |

ROLLER for smoother lawn surface. 36-inch wide, 18 inch diameter water-tight drum holds up to 390 lb. of weight. Rounded edges prevent harm to turf. Adjustable scraper automatically cleans drum. Stock number 71-24084.

SPREADER/SEEDERS make seeding, fertilizing, and weed killing easy. Broadcast spreaders are also useful for granular de-icers and sand.

71-24194 Drop type, 36 inch. 12 in. semi-pneumatic wheels. 100 lb. capcity steel hopper.

71-24394 Broadcasts over a 5 to 8 foot swath. 70 lb. capacity steel hopper. Noncorrosive spreading spinner, nylon gear box, stainless steel shaft.

71-24395 Broadcasts 8 to 10 foot swath. 160 lb. capacity.( covers 40,000sq. ft.)No-rust polypropylene hopper and impeller. Vinyl hopper cover.

71-2416 Broadcasts 6 to 8 foot swath. 50 lb. capacity. Corrosion-resistant construction. Polyethylene hopper.

CORING AERATOR takes small plugs out of soil to allow moisture and nutrients to reach grass roots. 36-inch swath. 24 hardened steel coring tips. 150 lb. capacity weight tray. Stock number 71-24351

AERATOR promotes deep root growth for a healthy lawn. Tapered 2.5" steel spikes mounted on 10-in. diameter discs puncture holes in soil at close intervals to let moisture soak it. Steel weight tray for increased penetration. Stock number 71-2435.

DETHATCHER loosens and flips thatch and matted leaves to lawn surface for easy pick up. Twenty spring tine teeth. Useful to prepare bare areas for reseeding. 40 inch rear mount: Stock number 71-24303. 38 inch front mount: Stock number 71-24301.

SPRAYERS use 12-volt DC electric motor that connects to the tractor battery or other 12-volt source. Includes booms for automatic spraying when pulling, and hand held wand for spot spraying. Wand has adjustable spray pattern. For applying herbicides, insecticides, fungicides, and liquid fertilizers.

71-2458 50 psi maximum pressure with 25 foot wand length. Sprays up to 25 feet with wand.

71-24398 25 psi maximum pressure with 18 foot wand length. Sprays up to 18 feet with wand.

DOZER BLADE removes snow; grades dirt, sand and gravel. 48 inches wide, 17 inches high, clears 44 inch path when angled. Master lift controle lever for operator ease. Spring trip for snow removal on uneven pavement; built - in float for blade to follow ground contour. Reversible, replaceable scraper bar. (Use with tire chains, wheel weights or rear drawbar weight). Stock No. 71-24401

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SNOWTHROWER has 40-inch swath. Drum-type auger handles powdery and wet/heavy snow. Mounts easily with simple pin arangement. Discharge chute adjusts to 240 degree arc from tractor seat. 6-inch diameter spout discharges snow 10 to 50 ft. Lift controlled at tractor seat. (Use with tire chains, wheel weights, or rear drawbar weight). Stock No. 71-24077 .

TIRE CHAINS are heavy duty; closely spaced extra-large cross links give smooth ride, outstanding traction. Stock No. 71-26945.

WHEEL WEIGHTS provide stability, reduce tearing of turf when moving on hills, stopping, turning, starting. Provides extra weight for traction to pull low-loads, lawn vac. Required for snow removal. For plowing: one in front frame, one in right rear tire, two on left rear tire. For snow blower or dozer blade: one on right rear tire, one on left rear tire. 55 pounds. Stock No. 71-26234. (Front or rear mounting frame bracket Stock No. 71-244360 OR 262235).

CHEVRON TIRES for extra traction. Pair of rear tires mounted on wheels. Stock No. 71-24166.

TRACTOR CAB has heavy duty vinyl fabric over tubular steel frame, fiberglass top; clear plastic windshield offers 360 degree visibility. Hinged metal frame doors with catch. Keeps operator warm and dry. Remove vinyl and windshield for use as sun protector in summer. Stock No. 71-24172.

Optional accessories for tractor cab: tinted/tempered solid safety glass wind shied with hand operated wiper (Stock No. 71-26168); 12-volt amber caution light for mounting on cab top (Stock No. 71-26169).

TRACTOR COVER protects tractor from weather. Made of Evolution 3 fabric (water-repellent, extremely breathable, light weight, soft, non-abrasive, pliable in all temperatures, durable, stain-tear-puncture resistant, will not shrink or stretch). Stock No. 71-24602.

*TILLER has 8hp engine to prepare seed beds, cultivate and compost garden residue. Chain- drive transmission. Six 11 inch dia., one piece heat-treated steel tines. Tills 30 inch path. (Requires sleeve hitch Stock No. 71-24235 ) Stock No. 71-25249.

*PLOW turns soil 6 inches deep, cuts 10 inch furrow. Crank adjustment controls depth, 3-position yoke sets width. Heavy steel landslide for straight forrowing. Stock No. 71-24233.

*DISC HARROW has 2 gangs of 4 steel blades that angle from 10 to 20 degrees 40 inches wide. Can hook 2 units in tandem. Stock No. 71-24234.

*REAR GRADER/LEVELER BLADE is 42-inches wide operated from driver's seat. Reversible steel blade can be angled at 30 degrees for grading. Reverses for snow plowing. Stock No. 71-24239.

*SLEEVE CULTIVATOR is 43 inches wide. Prepares ground for seeding, helps weed control. Steel frame holds 5 adjustable sweeps. Adjusts vertically, horizontally, Stock No. 71-25304. Optional accessory for cultivator: steel furrow opener for wider for wide openings for potatoes, corn, and other deep seeded crops (Stock No. 71-25305).

WEIGHT BRACKET for drawbar for snow removal applications. Can be mounted on front of tractor for plowing applications. Uses (1) 55 lb. weight - number 71-26234.

*Asterisked attachments require sleeve hitch (Stock No. 71-24235) for use with master lift system. Single pin couples/uncouples.

Source for Attachments 842.

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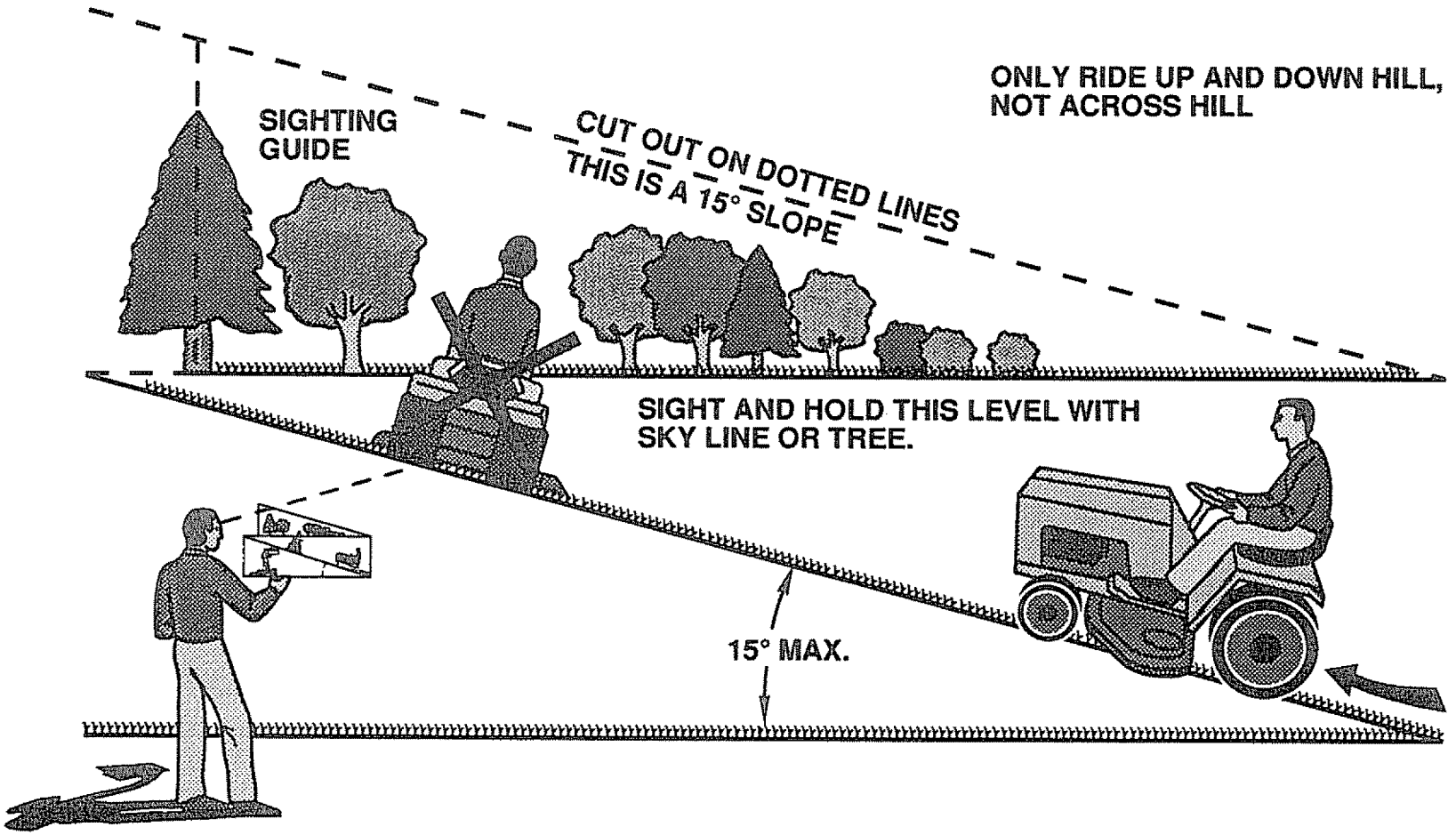
# SUGGESTED GUIDE FOR SIGHTING SLOPES FOR SAFE OPERATION


ONLY RIDE UP AND DOWN HILL, NOT ACROSS HILL
SIGHTING GUIDE
CUT OUT ON DOTTED LINES
THIS IS A 15° SLOPE
SIGHT AND HOLD THIS LEVEL WITH SKY LINE OR TREE.
15° MAX.

**Operate your Tractor up and down the face of slopes (not greater than 15°) never across the face. Make turns gradually to prevent tipping or loss of control. Exercise extreme caution when changing direction on slopes.**

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SEARS

# OWNER'S MANUAL

**MODEL NO. 917.254460**

**MODEL NO. 917.250040 (without Mower Deck)**

## HOW TO ORDER REPAIR PARTS

CRAFTSMAN®

# 20.0 HP TWIN ELECTRIC START 44" MOWER DECK 6 SPEED TRANSAXLE GARDEN TRACTOR

Each Tractor has its own model number. Each Engine has its own model number.

The Model Number for your Tractor will be found on the Model Plate located under the seat.

The model number for the Engine will be found on the Blower Housing.

All parts listed herein may be ordered from any Sears, Roebuck and Co. Service Centers and most Retail Stores.

WHEN ORDERING REPAIR PARTS, ALWAYS GIVE THE FOLLOWING INFORMATION:

- PRODUCT - 20.0 HP GARDEN TRACTOR
- MODEL NUMBER - 917.254460 AND 917.250040
- ENGINE MODEL NUMBER -MV20S - SPEC NUMBER -57517
- PART NUMBER
- PART DESCRIPTION

Your Sears merchandise has added value when you consider Sears has service units nationwide staffed with Sears trained technicians.... professional technicians specifically trained to insure that we meet our pledge to you, we service what we sell.

**Sears, Roebuck and Co., Chicago, IL 60684 U.S.A.**

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